

Requested Changes to Building 776/777 DOP

Proposed changes to the DOP are identified by section number

- 1) Section 4 5, Table 6, Building 776/777 RCRA-Regulated Units Please add the following unit to Table 6

Room	RCRA Unit	SET	Description	Status	Proposed Closure
134E	N/A	11	Tank V-747A	Mixed Residue (identified 12/05/00)	Physically empty/Removal

- 2) Appendix H, RCRA Unit-Specific Closure Information Sheets Please add the attached closure information sheets and drawings for RCRA-regulated components in work sets 4, 5, 6, 10, 11, 18, 21, 22, 27, 29, 34, 35, 36, and 52



REVIEWED FOR CLASSIFICATION/UCNI
BY: <u>SL Cunningham</u>
DATE: <u>1/26/01</u> <u>ONU Pub.Relok</u>

ADMIN RECORD

000054
B776-A-00000

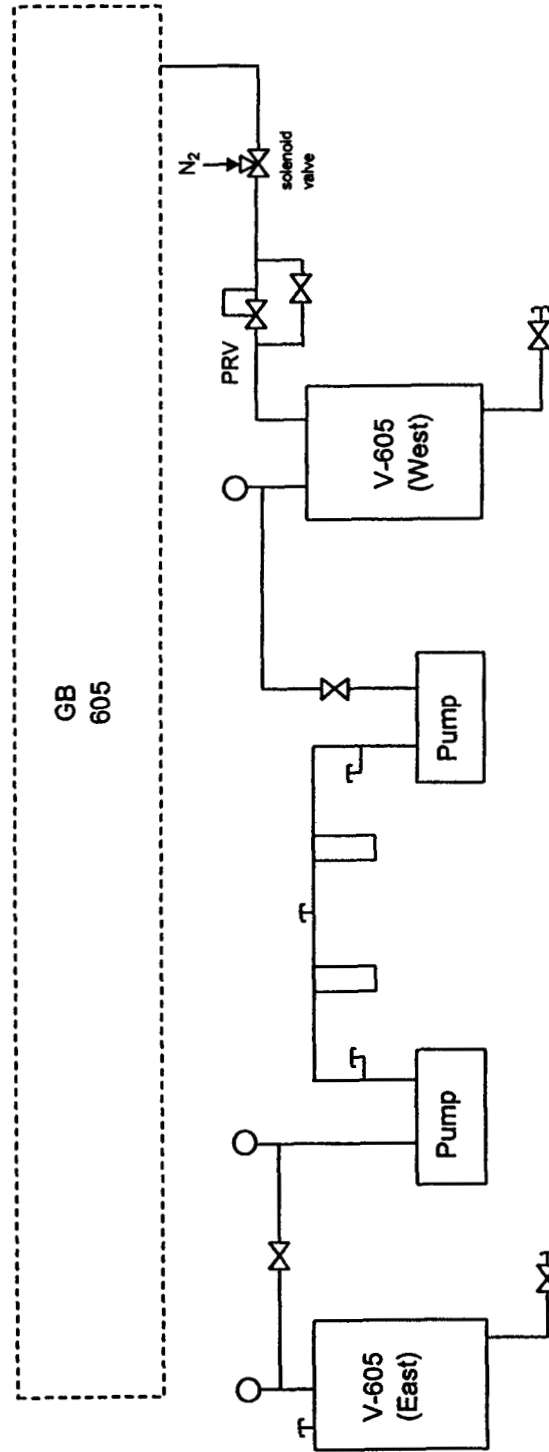
Appendix H
B776/777 Closure Project
RCRA Unit Closure Information Sheet

4	NA 95.019 NA	Tank V-605 (2) Tank DL-776 GB 612 ancillary piping	Mixed Residue Mixed Residue Mixed Residue	Physically Empty/RCRA Stable Physically Empty/RCRA Stable Physically Empty

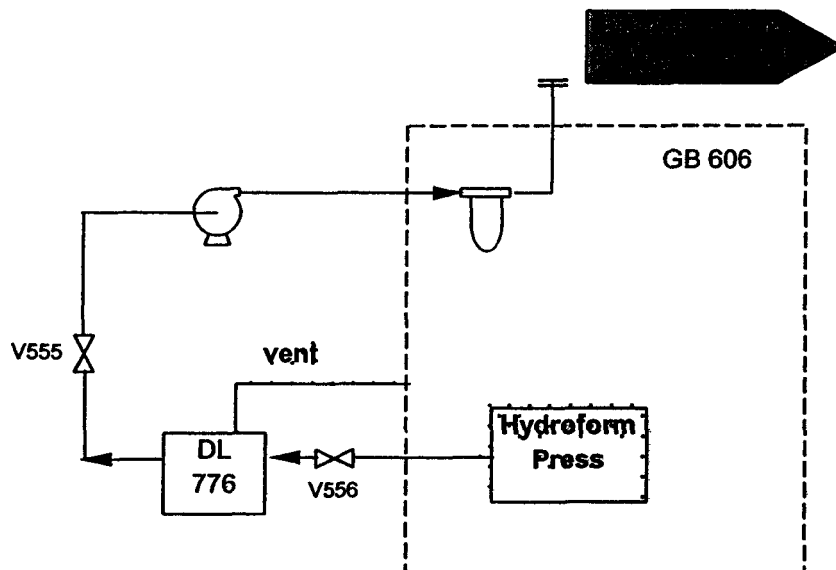
Unit Description:	<p><u>Tank V-605</u></p> <p>Tank V-605 includes two vacuum accumulator tanks. They are constructed of carbon steel and have approximate dimensions of 12 inches in diameter by 23 inches high. The tanks are located in Building 777 Room 131 below Glovebox 605.</p> <p>Vacuum was used to hold parts to lathes in the gloveboxes as they were being machined. The vacuum accumulators were used in the process line between the lathe and the vacuum pump so that constant vacuum pressure could be maintained on the parts being machined. In the event of an upset condition where the part came loose from the chuck, the cutting oils and solvents used in the machining process would be pulled into the accumulators. Maintenance personnel periodically drained the accumulators of any oil and solvent that accumulated.</p> <p>Both Tank V-605s were drained to a physically empty condition in May 1999 under work package T0100104. The vacuum pumps were drained in January 2000.</p> <p><u>Tank DL-776</u></p> <p>Tank DL-776 measures approximately two feet by two feet by four feet, and is filled with raschig rings. The tank is located in Building 777 Room 131 beneath Glovebox 606.</p> <p>Tank DL-776 was used to collect waste oil from the hydroform press located in Glovebox 606. Glovebox 606 served as secondary containment for the ancillary equipment within it. The RLCR states that the hydroform press and tank were replaced in the late 1980s and were never used to press plutonium parts. They may have been used to test press aluminum parts. Tank DL-776 was drained to a physically empty condition in May 1999 under work package T0100104.</p> <p><u>Glovebox 612 Ancillary Piping</u></p> <p>Waste oil collected in slab tank oil carts by maintenance personnel was pumped out of the carts into an enclosed pump-out station on the west side of Glovebox 612, where it was filtered through Ful-Flo cartridge filters in the glovebox and transferred to Tanks T-A1 and T-A2 in Room 131. These tanks were closed by removal in 1996 along with the piping from GB 612 to the tanks. The filters inside the glovebox have also been removed. Remaining equipment includes a small amount of equipment associated with the cart pump-out station attached to the glovebox.</p>
Unit Boundaries and Interfaces:	<p>The vacuum accumulator systems include the vacuum accumulator tanks, vacuum pumps, and associated piping and valves. These were small stand-alone tank systems and the ancillary equipment is minimal. These tank systems will be entirely removed as part of Set</p>

	<p>4 D&D The attached drawing shows a schematic of the V-605 tank systems</p> <p>Schematics are also attached showing the extent of the regulated systems associated with Tank DL-776 and GB 612 These systems will be entirely removed as part of Set 4 D&D</p>
EPA Waste Codes/ Waste Characterization:	<p>The lines and equipment will be drained prior to packaging as waste The waste generated at closure will be assigned EPA waste codes of F001 and F002</p> <p>When the vacuum accumulators and Tank DL-776 were drained, the collected liquids from several tanks were commingled prior to analysis, so it is not known whether Tank DL-776 contained hazardous waste This tank system will be conservatively managed as mixed waste at closure, including the raschig rings</p> <p>Glovebox 606 will be cleaned using debris rule technology and will then be closed by removal and managed as non-hazardous LLW</p>
Selected Closure Option:	<p><u>Tanks and ancillary piping</u> Unit removal without onsite treatment</p> <p><u>Glovebox 606</u> Unit removal in conjunction with debris rule treatment</p>
Closure Activities:	<p>Closure activities include draining any residual liquids, removal, size reduction (if necessary) and packaging of the regulated tanks and ancillary equipment The raschig rings in Tank DL-776 will either be removed during deactivation activities or during closure activities</p> <p>Glovebox 606 will be wiped down using trisodium phosphate solution, and will be visually inspected to determine if it meets the standard for a clean debris surface If it meets the standard, the glovebox will be closed by removal and managed as non-hazardous waste Otherwise, it will be closed by removal and managed as mixed waste</p>
Waste Disposal:	<p>The tanks, piping, pumps, raschig rings, and secondary waste (e.g., PPE and plastic containment material) generated during closure activities will be managed as CERCLA remediation waste Liquid hazardous wastes, if any, drained from the equipment will be managed as RCRA-regulated wastes Absorbent will be added to waste packages with items that could contain residual liquids or sludges</p> <p>Upon final radiological characterization, the waste will be packaged and managed in accordance with waste management requirements in Section 6 of the DOP</p>

B776/777, SET 4
Building 777 Room 131
Vacuum Accumulators V-605

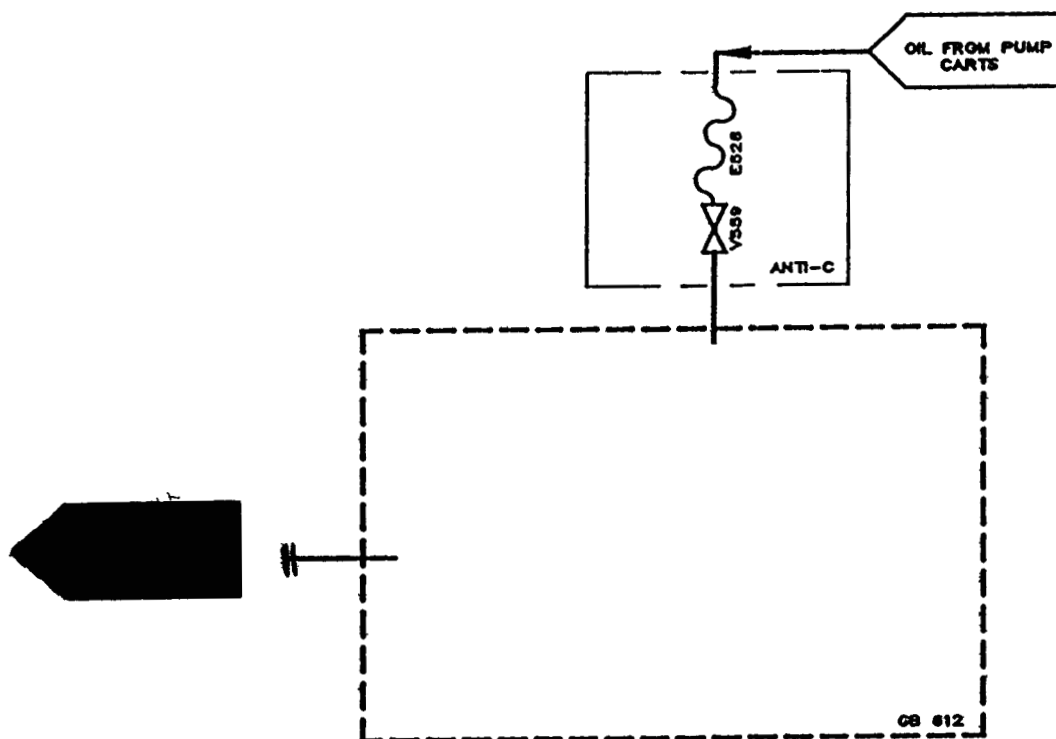


B776/777, SET 4
Building 777 Room 131
Tank DL-776
RCRA Unit 95.019



Shading indicates non-regulated equipment

B776/777, SET 4
Building 777 Room 131
Glovebox 612 Ancillary Piping



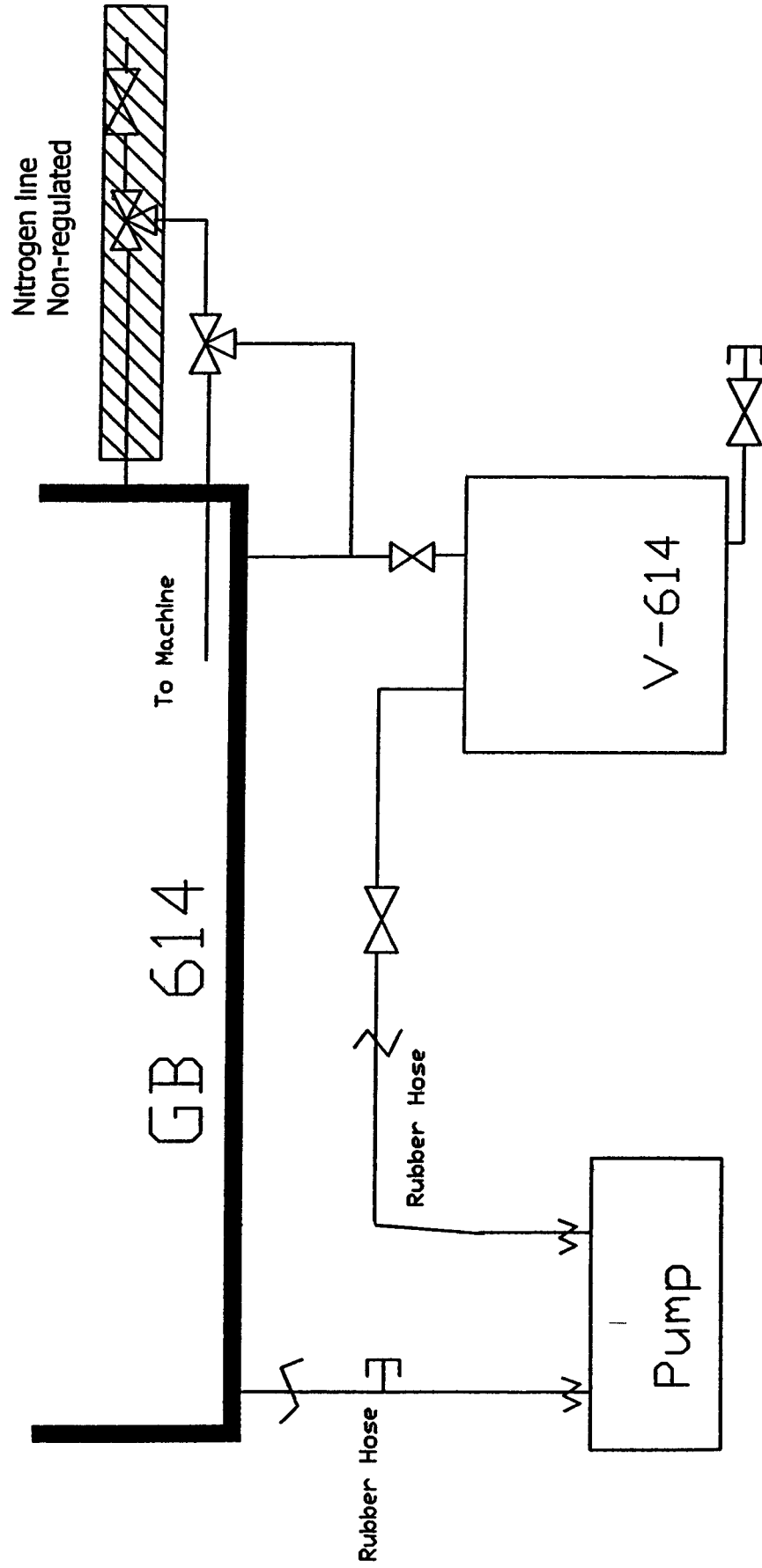
Appendix H
B776/777 Closure Project
RCRA Unit Closure Information Sheet

RCRA Unit Closure Information Sheet				
5	NA	Tank V-614	Mixed Residue	Physically Empty/RCRA Stable
	NA	Tank V-616	Mixed Residue	Physically Empty/RCRA Stable
	NA	Tank V-618	Mixed Residue	Physically Empty/RCRA Stable
	NA	Tank V-620	Mixed Residue	Physically Empty/RCRA Stable

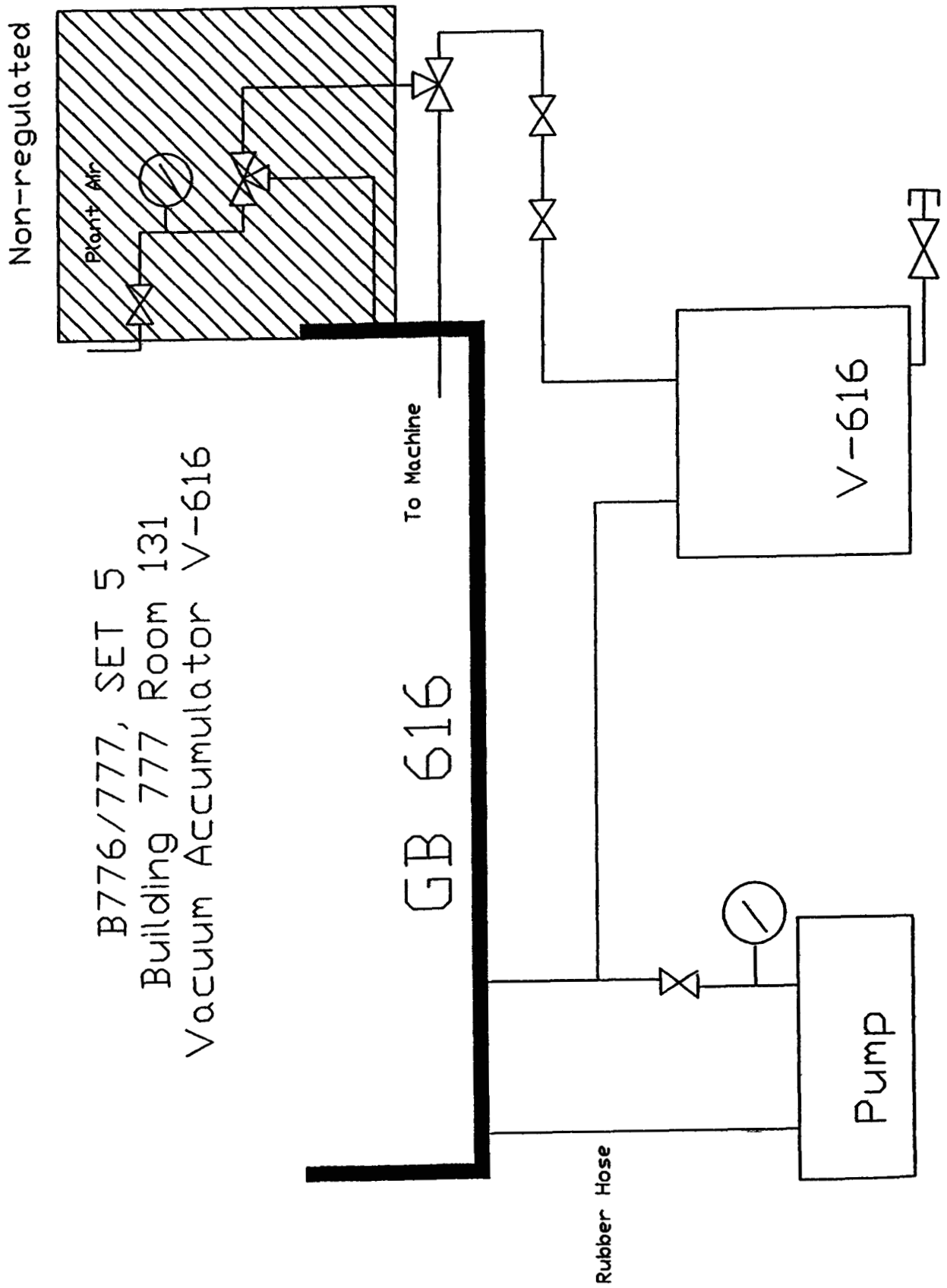
Unit Description:	<p>Tanks V-614, V-616, V-618, and V-620 are vacuum accumulator tanks. They are constructed of carbon steel and have approximate dimensions of 12 inches in diameter by 23 inches high. The tanks are located in Building 777 Room 131 below gloveboxes 614, 616, 617, and 620, respectively.</p> <p>Vacuum was used to hold parts to lathes in the gloveboxes as they were being machined. The vacuum accumulators were used in the process line between the lathe and the vacuum pump so that constant vacuum pressure could be maintained on the parts being machined. In the event of an upset condition where the part came loose from the chuck, the cutting oils and solvents used in the machining process would be pulled into the accumulators. Maintenance personnel periodically drained the accumulators of any oil and solvent that accumulated. The lathe in glovebox 617 was never put into operation, and the glovebox windows are open to the room. It is not known whether cold testing was performed or whether solvents were collected in Tank V-618.</p> <p>Tanks V-614, V-616, V-618, and V-620 were drained to a physically empty condition in May and June 1999 under work package T0100104. The vacuum pumps were drained in January 2000.</p>
Unit Boundaries and Interfaces.	The vacuum accumulator systems include the vacuum accumulator tanks, vacuum pumps, and associated piping and valves. These were small stand-alone tank systems and the ancillary equipment is minimal. These tank systems will be entirely removed as part of Set 5 D&D. The attached drawings show schematics of the tank systems.
EPA Waste Codes/ Waste Characterization.	<p>The lines and equipment will be drained prior to packaging as waste. The waste generated at closure will be assigned EPA waste codes of F001 and F002.</p> <p>When the vacuum accumulators were drained, the collected liquids from several tanks were commingled prior to analysis, so it is not known whether Tank V-618 contained hazardous waste. This tank system will be conservatively managed as mixed waste at closure.</p>
Selected Closure Option:	Unit removal without onsite treatment
Closure Activities:	Closure activities include draining any residual liquids, removal, size reduction (if necessary) and packaging of the regulated tanks and ancillary equipment.
Waste Disposal:	The tanks, piping, pumps, and secondary waste (e.g., PPE and plastic containment material) generated during closure activities will be managed as CERCLA remediation waste. Liquid hazardous wastes, if any, drained from the equipment will be managed as RCRA-regulated wastes. Absorbent will be added to waste packages with items that could contain residual liquids or sludges.

	Upon final radiological characterization, the waste will be packaged and managed in accordance with waste management requirements in Section 6 of the DOP
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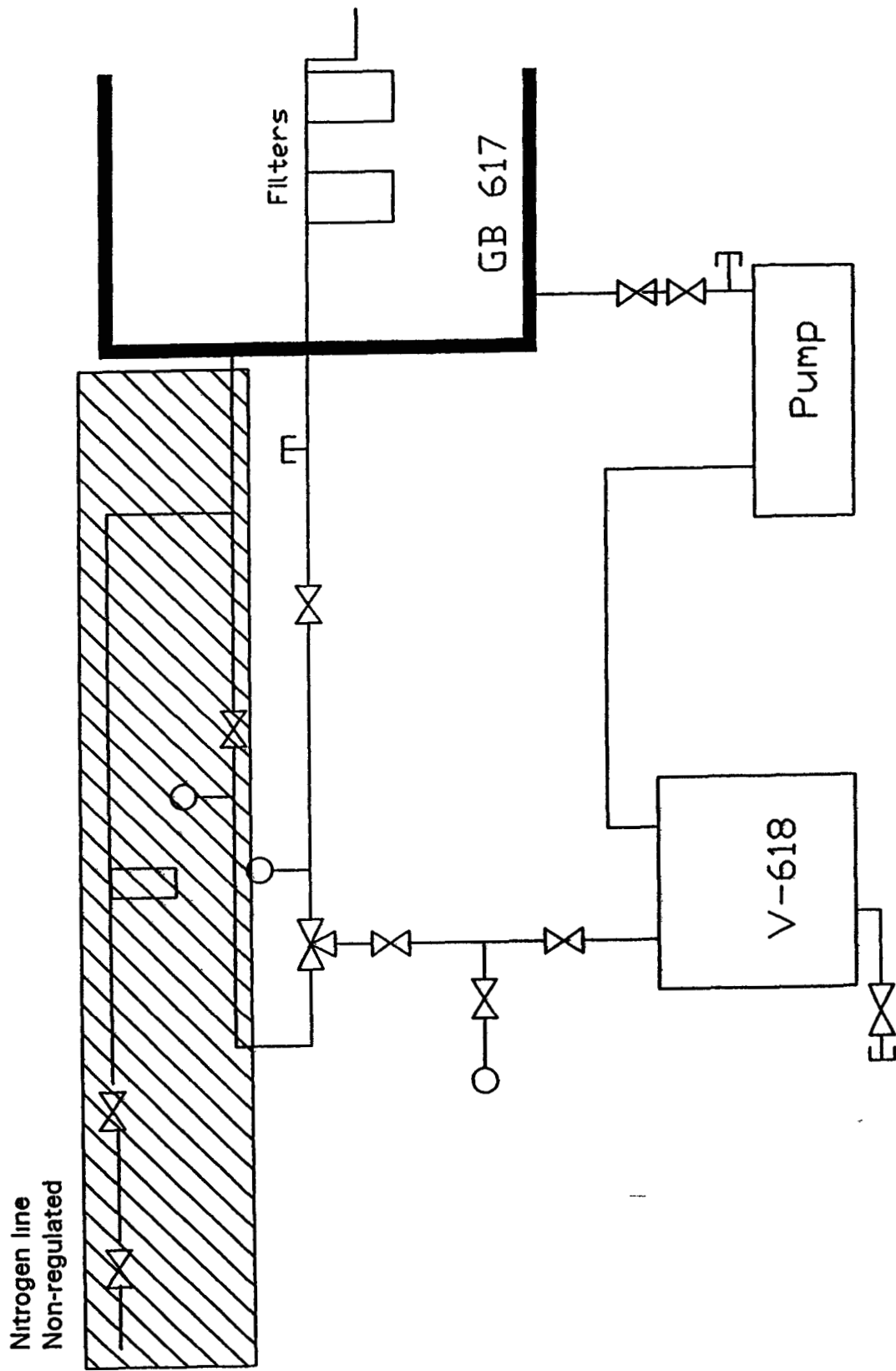
B776/777, SET 5
Building 777 Room 131
Vacuum Accumulator V-614



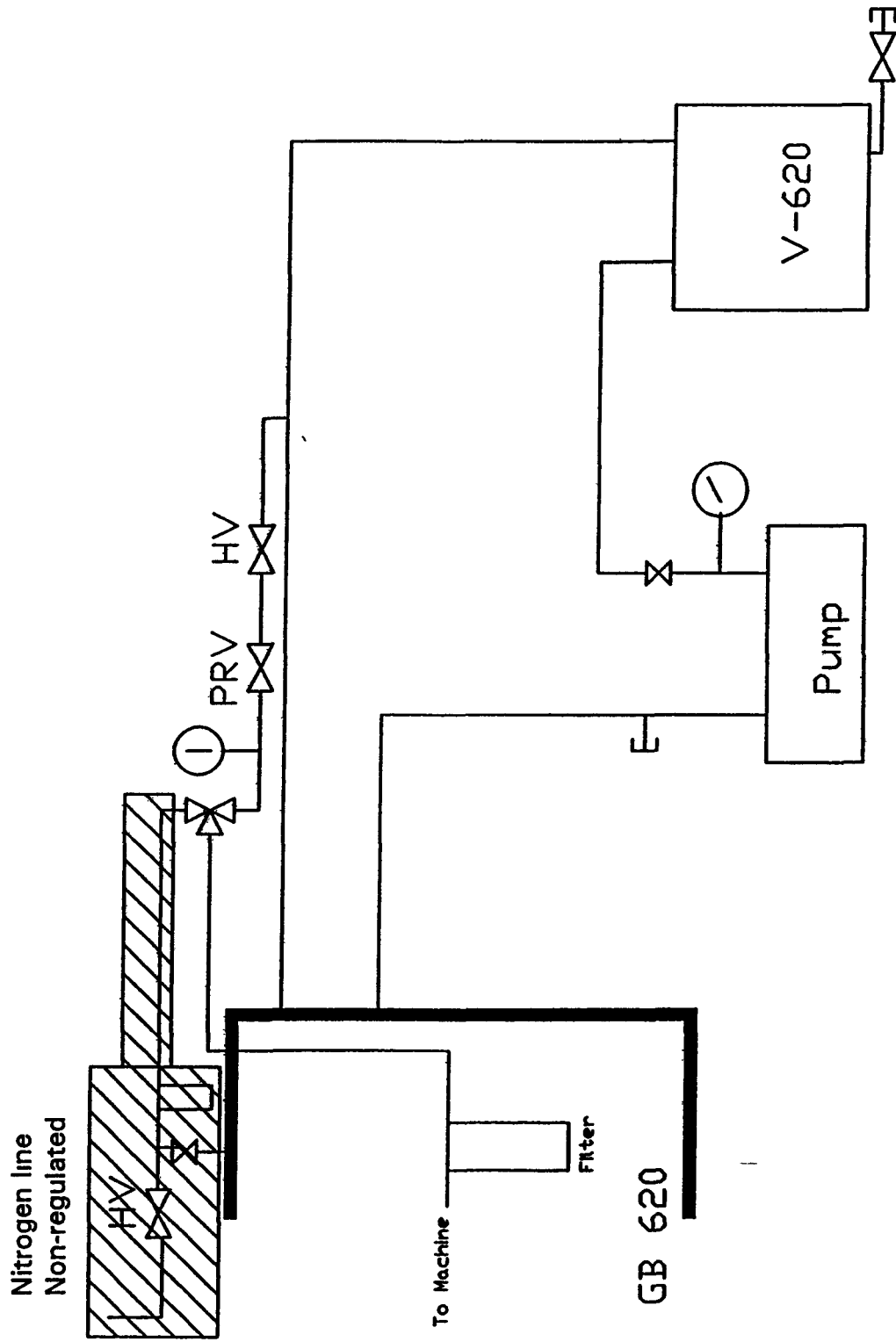
B776/777, SET 5
Building 777 Room 131
Vacuum Accumulator V-616



B776/777, SET 5
Building 777 Room 131
Vacuum Accumulator V-618



B776/777, SET 5
Building 777 Room 131
Vacuum Accumulator V-620



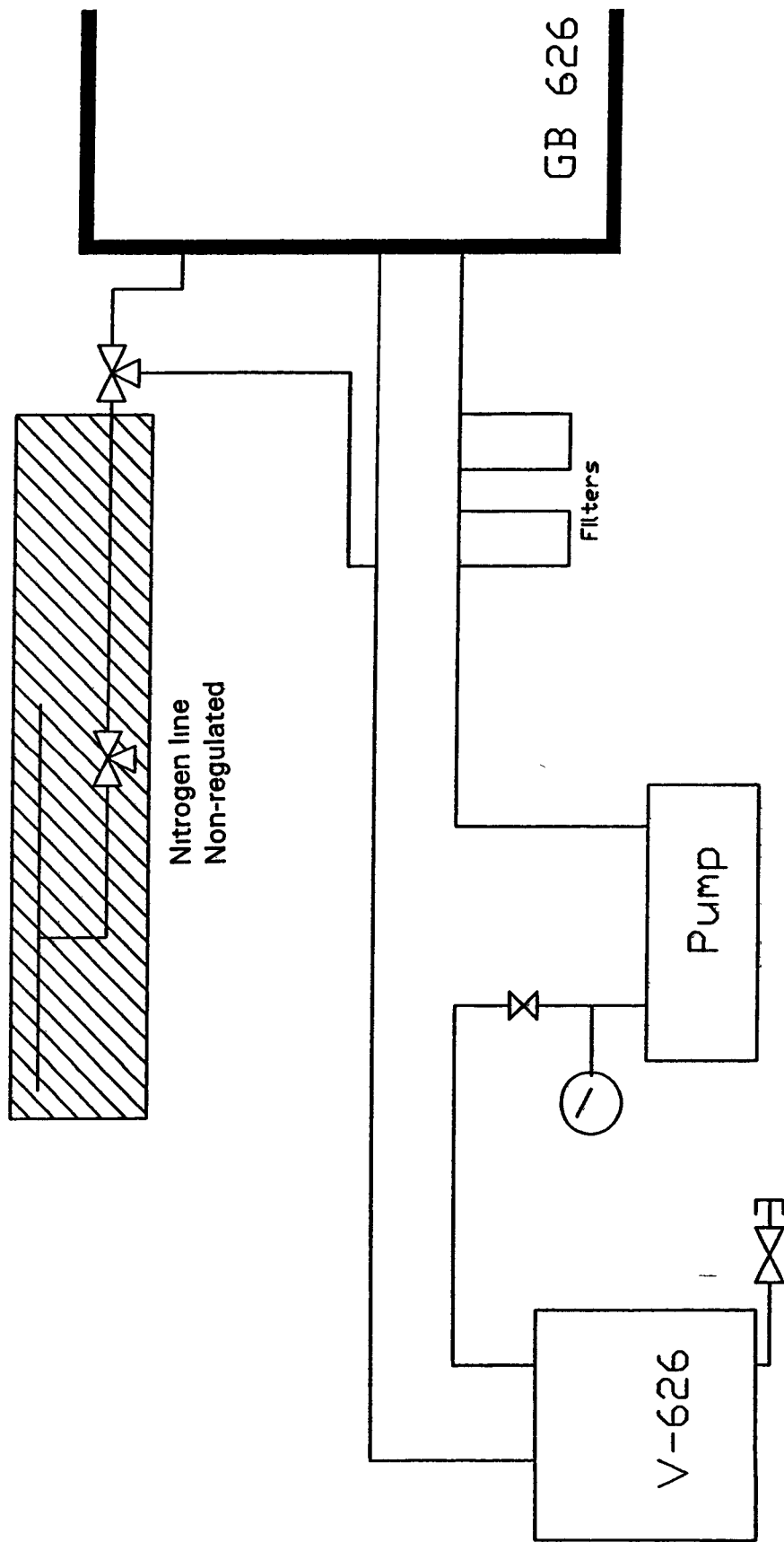
Appendix H
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RCRA Unit Closure Information Sheet

RCRA Unit Closure Information Sheet				
6	NA NA Ancillary to several units (see below)	Tank V-626 Tank V-627 Glovebox 642 and ancillary piping	Mixed Residue Mixed Residue Mixed Residue	Physically Empty/RCRA Stable Physically Empty/RCRA Stable Physically Empty

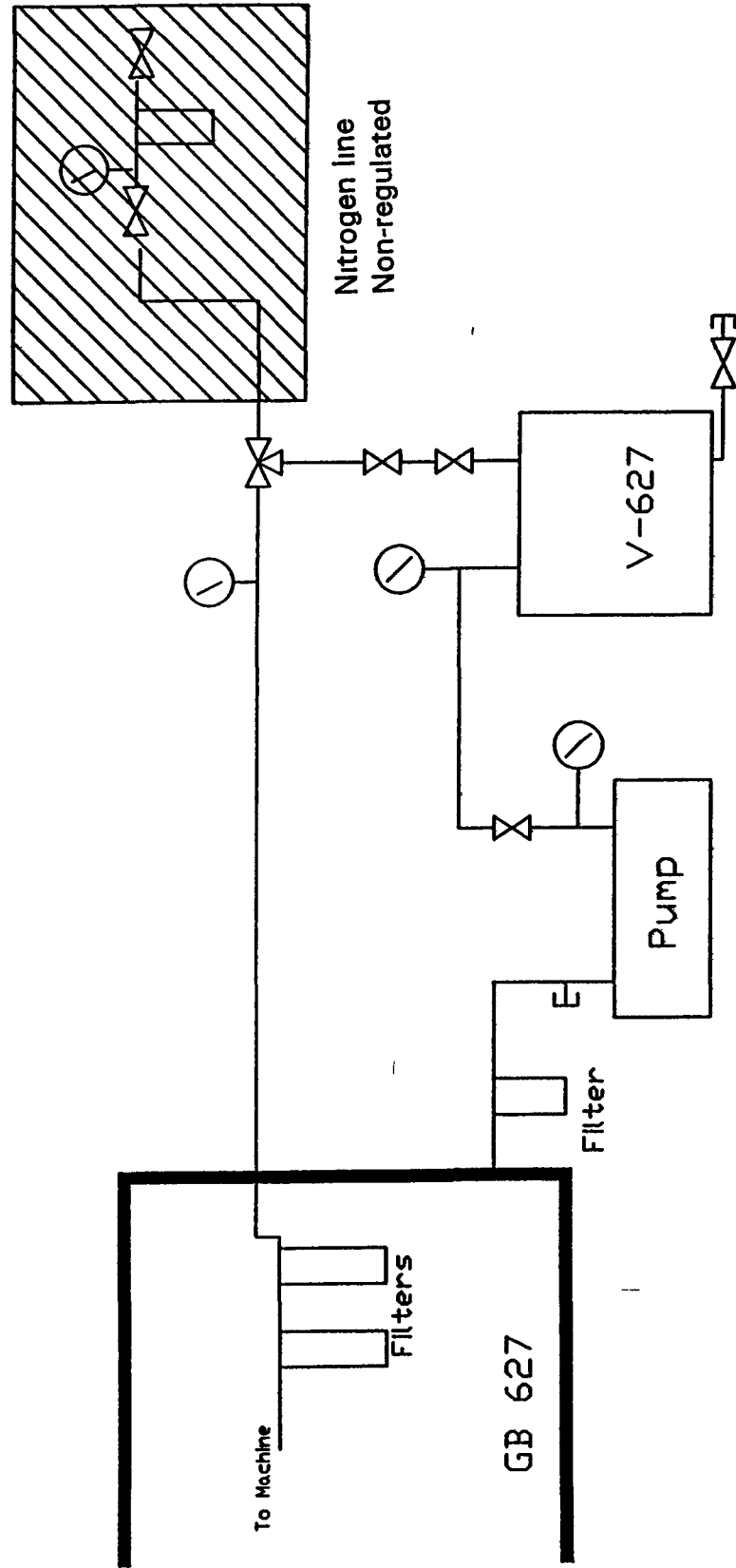
Unit Description:	<p><u>Tanks V-626 and V-627</u></p> <p>Tanks V-626 and V-627 are vacuum accumulator tanks. They are constructed of carbon steel and both have approximate dimensions of 12 inches in diameter by 23 inches high. The tanks are located in Building 777 Room 131 below gloveboxes 626 and 627, respectively.</p> <p>Vacuum was used to hold parts to a jig borer and a lathe in gloveboxes 626 and 627, respectively, as they were being machined. The vacuum accumulators were used in the process line between the equipment and the vacuum pump so that constant vacuum pressure could be maintained on the parts being machined. In the event of an upset condition where the part came loose from the chuck, the cutting oils and solvents used in the machining process would be pulled into the accumulators. Maintenance personnel periodically drained the accumulators of any oil and solvent that accumulated.</p> <p>Tanks V-626 and V-627 were drained to a physically empty condition in June 1999 under work package T0100104. The vacuum pumps were drained in January 2000.</p> <p><u>Glovebox 642 and Ancillary Piping</u></p> <p>Glovebox 642 is a filter glovebox where waste from tanks 1103, 1104, 1106 and pencil tanks T-A1, T-A2, T-3, T-4, T-5, T-6, T-10, T-11, and T-12 was passed through Ful-Flo cartridge filters for removal of plutonium (RCRA Unit Nos. 95 001, 95 002, 95 006 – 95 013, 95 017, and 95 018). The glovebox is located in Building 777 Room 131. All the tanks have been closed by removal, and the six filters in the glovebox have been removed. Remaining equipment includes inlet and outlet piping, and the glovebox itself, which served as secondary containment for the filters.</p>
Unit Boundaries and Interfaces:	<p><u>Tanks V-626 and V-627</u></p> <p>The vacuum accumulator systems include the vacuum accumulator tanks, vacuum pumps, and associated piping and valves. These were small stand-alone tank systems and the ancillary equipment is minimal. These tank systems will be entirely removed as part of Set 6 D&D. The attached drawings show schematics of the tank systems.</p> <p><u>Glovebox 642 and Ancillary Piping</u></p> <p>Glovebox 642 and the ancillary equipment below approximately eight feet will be removed during Set 6 D&D, and the ends of the piping leading into the overhead will be capped or plugged. The remaining lines in the overhead in Room 131 will be removed as part of Set 78 (miscellaneous piping over eight feet). The attached drawing shows a schematic of GB642 and associated ancillary equipment.</p>

EPA Waste Codes/ Waste Characterization:	The lines and equipment will be drained prior to packaging as waste. The waste generated at closure will be assigned EPA waste codes of F001 and F002.
Selected Closure Option:	Unit removal without onsite treatment. The interior of Glovebox 642 is not in sufficient condition or adequately visible to conduct debris rule treatment, so the glovebox will be managed as mixed waste.
Closure Activities:	Closure activities include draining any residual liquids, removal, size reduction (if necessary) and packaging of the regulated tanks and ancillary equipment.
Waste Disposal:	<p>The tanks, piping, glovebox, and secondary waste (e.g., PPE and plastic containment material) generated during closure activities will be managed as CERCLA remediation waste. Liquid hazardous wastes, if any, drained from equipment will be managed as RCRA-regulated wastes. Absorbent will be added to waste packages with items that could contain residual liquids or sludges.</p> <p>Upon final radiological characterization, the waste will be packaged and managed in accordance with waste management requirements in Section 6 of the DOP.</p>

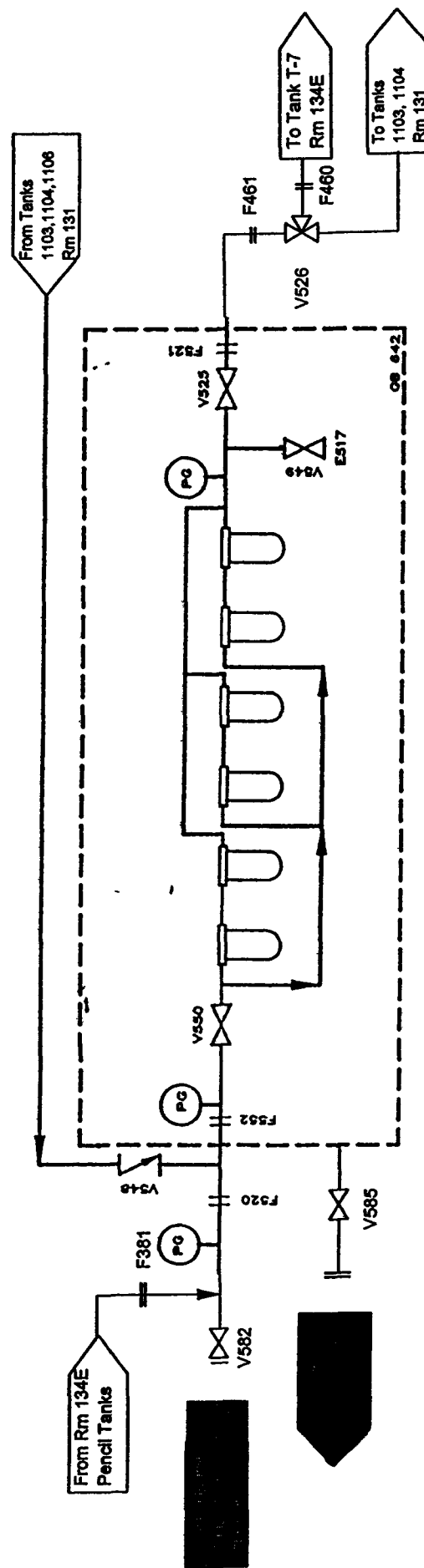
B776/777, SET 6
Building 777 Room 131
Vacuum Accumulator V-626



B777/776, SET 6
Building 777 Room 131
Vacuum Accumulator V-627



B776/777, SET 6
Building 777 Room 131
Glovebox 642 Ancillary Piping



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Appendix H
B776/777 Closure Project
RCRA Unit Closure Information Sheet

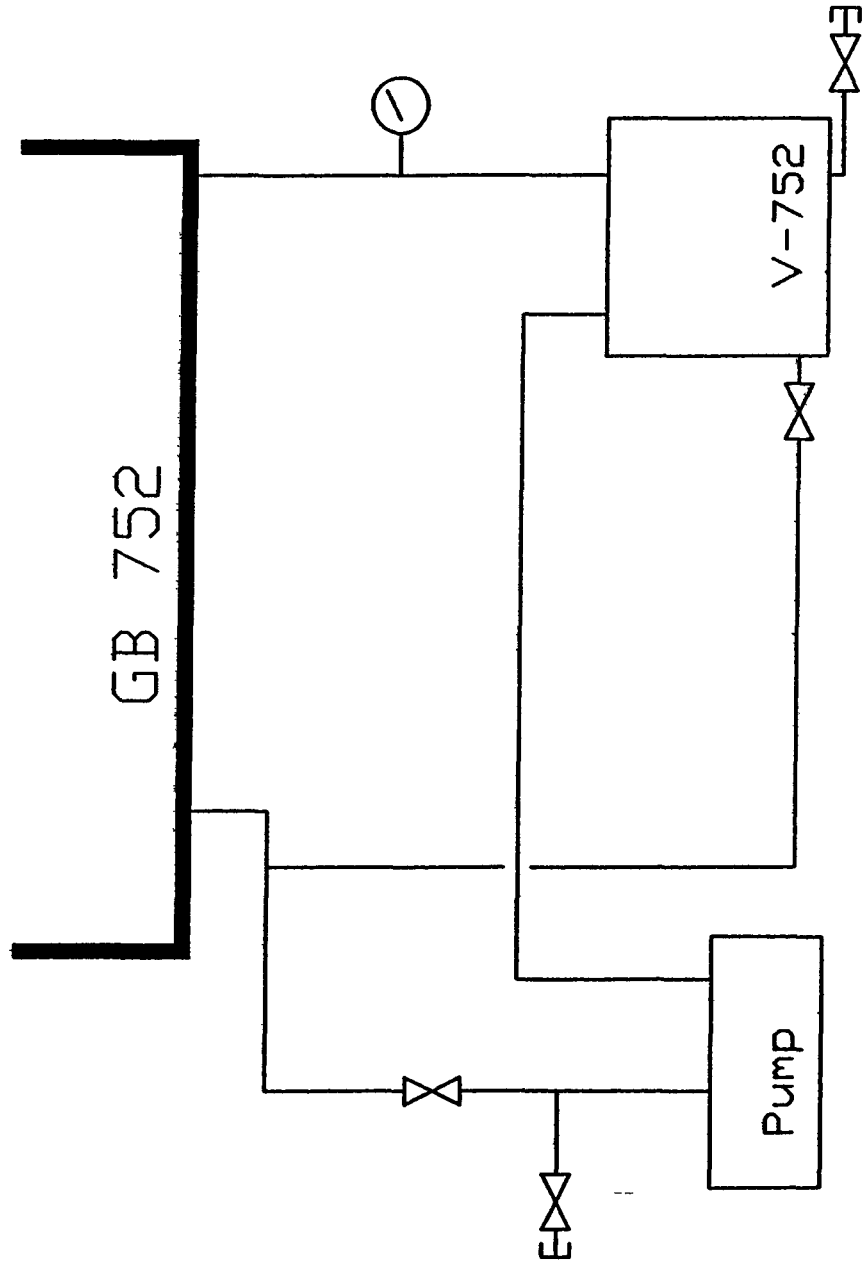
Building 776/777 Closure Project - RCRA Unit Closure Information Sheet				
10	NA Various	Tank V-752 Ancillary piping	Mixed Residue Mixed Residue	Physically Empty/RCRA Stable Physically Empty

Unit Description:	<p><u>Tank V-752</u></p> <p>Tank V-752 is a vacuum accumulator tank. It is constructed of carbon steel and has approximate dimensions of 12 inches in diameter by 23 inches high. The tank is located in Building 777 Room 134 East below Glovebox 752.</p> <p>Vacuum was used to hold parts to a jig borer in the glovebox as they were being machined. The vacuum accumulator was used in the process line between the equipment and the vacuum pump so that constant vacuum pressure could be maintained on the parts being machined. In the event of an upset condition where the part came loose from the chuck, the cutting oils and solvents used in the machining process would be pulled into the accumulator. Maintenance personnel periodically drained the accumulator of any oil and solvent that accumulated.</p> <p>Tank V-752 was drained to a physically empty condition in June 1999 under work package T0100104. The vacuum pump was drained in January 2000.</p> <p><u>Ancillary Piping</u></p> <p>Set 10 contains ancillary piping that was previously used to transfer waste oil and solvents from pencil tanks in Room 134 East to filter glovebox 642 in Room 131. The tanks have been removed.</p>
Unit Boundaries and Interfaces:	<p>The vacuum accumulator system includes the vacuum accumulator tank, vacuum pump, and associated piping and valves. This was a small stand-alone tank system and the ancillary equipment is minimal. This tank system will be entirely removed as part of Set 10 D&D. The attached drawing shows a schematic of the tank system.</p> <p>The Set 10 ancillary piping includes oil/solvent transfer piping beneath the D-line and M-line. All ancillary piping beneath approximately eight feet will be removed as part of Set 10, and the ends of the piping leading into the overhead will be capped or plugged. The remaining lines in the overhead in Room 134 East will be removed as part of Set 78 (miscellaneous piping over eight feet). A drawing is attached showing ancillary equipment in Sets 10 and 11. Endpoints for piping removal associated with each set will be determined during D&D work package preparation.</p>
EPA Waste Codes/ Waste Characterization:	The lines and equipment will be drained prior to packaging as waste. The waste generated at closure will be assigned EPA waste codes of F001 and F002.
Selected Closure Option:	Unit removal without onsite treatment
Closure Activities:	Closure activities include draining any residual liquids, removal, size reduction (if necessary) and packaging of the regulated tank and ancillary equipment.
Waste Disposal:	The tank, piping, pump, and secondary waste (e.g., PPE and plastic containment material) generated during closure activities will be managed as CERCLA remediation waste. Liquid hazardous wastes, if any, drained from the equipment will be managed as RCRA-

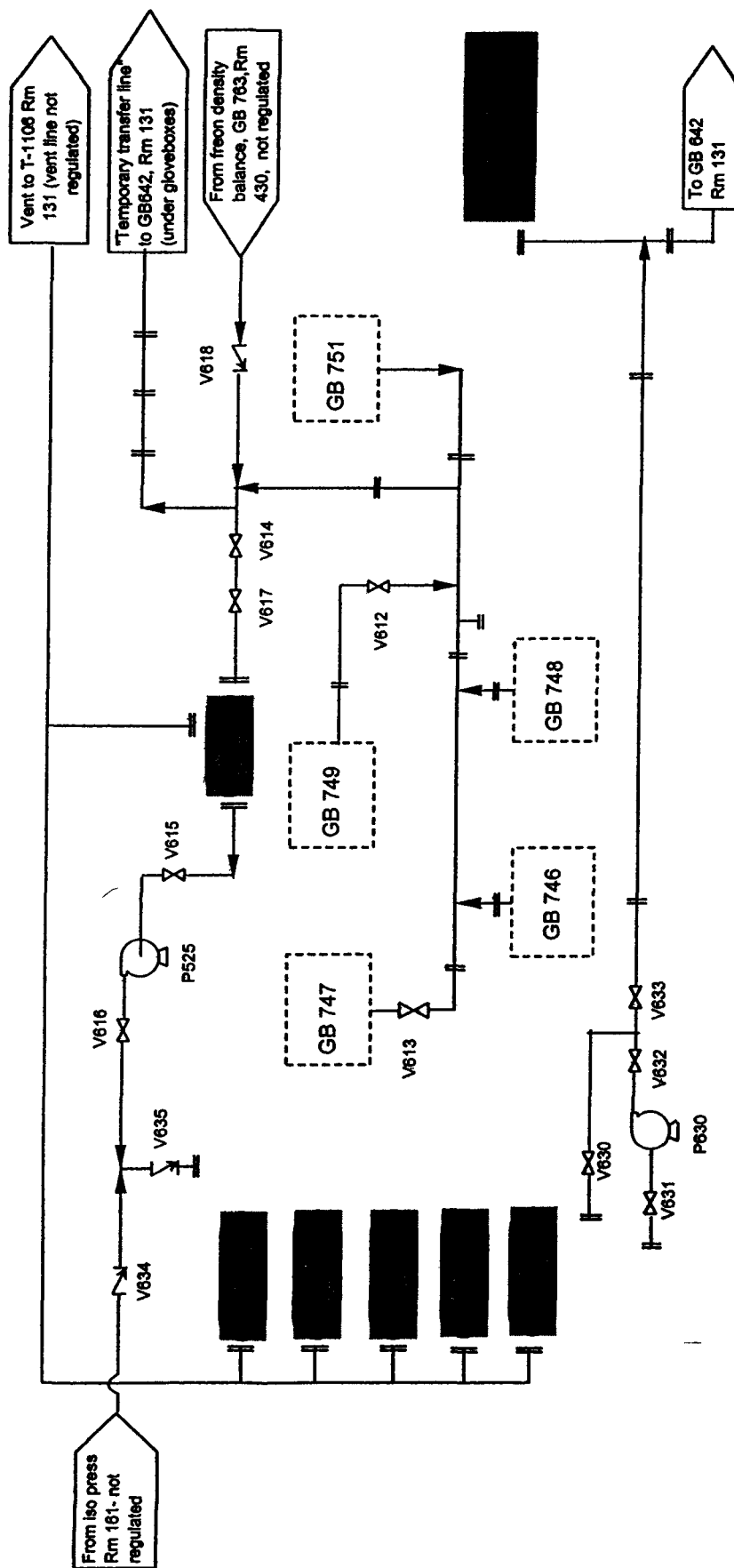
18

	<p>regulated wastes. Absorbent will be added to waste packages with items that could contain residual liquids or sludges</p> <p>Upon final radiological characterization, the waste will be packaged and managed in accordance with waste management requirements in Section 6 of the DOP</p>
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B776/777, Set 10
Building 777 Room 134E
Vacuum Accumulator V-752



**B776/777, SETS 10 and 11
Building 777 Room 134E
Ancillary Piping**



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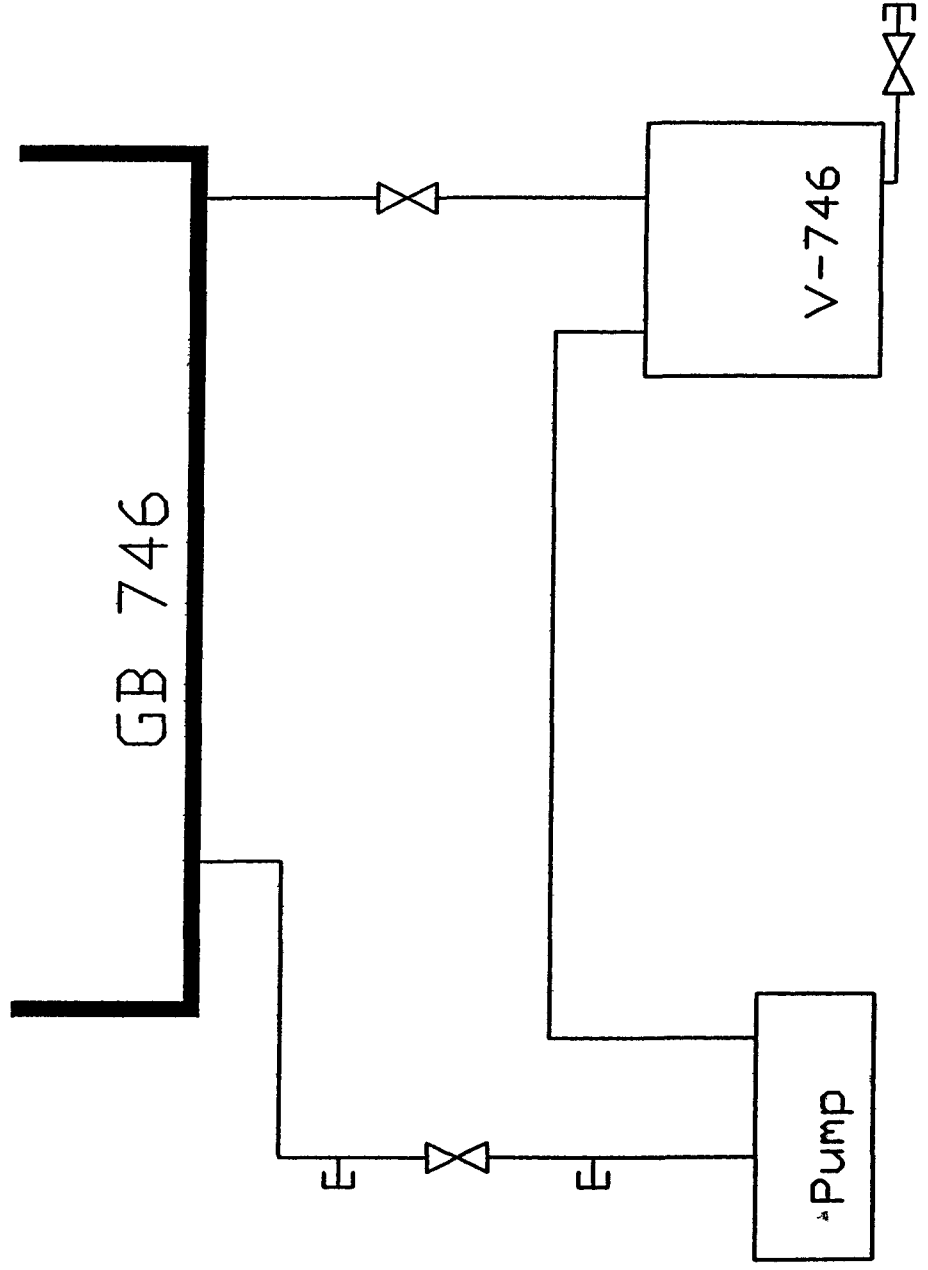
Appendix H
B776/777 Closure Project
RCRA Unit Closure Information Sheet

RCRA Unit Closure Information Sheet				
11	NA	Tank V-746	Mixed Residue	Physically Empty/RCRA Stable
	NA	Tank V-747	Mixed Residue	Physically Empty/RCRA Stable
	NA	Tank V-747A	Mixed Residue	Physically Empty/RCRA Stable
	NA	Tank V-748	Mixed Residue	Physically Empty/RCRA Stable
	NA	Tank V-749	Mixed Residue	Physically Empty/RCRA Stable
	Various	Ancillary equipment	Mixed Residue	Physically Empty

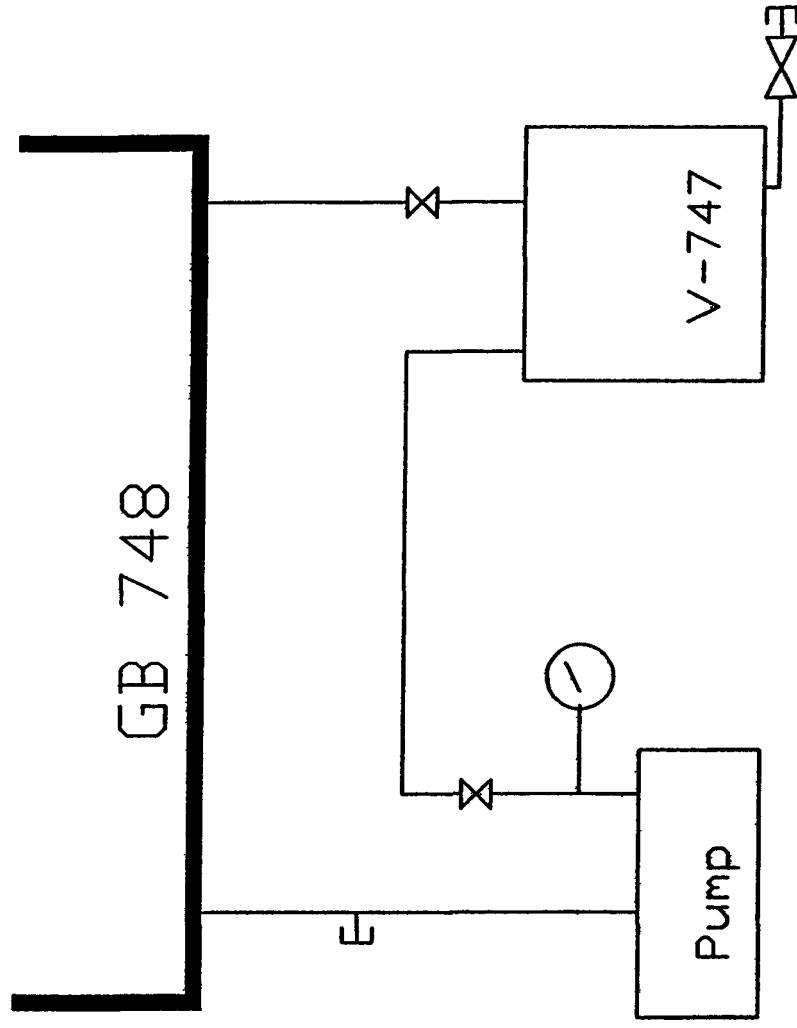
Unit Description:	<p><u>Tanks V-746, V-747, V-747A, V-748, V-749</u></p> <p>Tanks V-746, V-747, V-747A, V-748, and V-749 are vacuum accumulator tanks. Tanks V-746, V-747, V-748, and V-749 are constructed of carbon steel and have approximate dimensions of 12 inches in diameter by 23 inches high. Tank V-747A has approximate dimensions of 6 inches in diameter by 12 inches high. The tanks are located in Building 777 Room 134 East. Tank V-747A is below the connector line between glovebox 747 and the M-line. Tanks V-746, V-747, V-748, and V-749 are below the M-line at the junctions with Gloveboxes 746, 748, 749, and just east of 749, respectively.</p> <p>Vacuum was used to hold parts to lathes in the gloveboxes as they were being machined. The vacuum accumulators were used in the process line between the lathe and the vacuum pump so that constant vacuum pressure could be maintained on the parts being machined. In the event of an upset condition where the part came loose from the chuck, the cutting oils and solvents used in the machining process would be pulled into the accumulators. Maintenance personnel periodically drained the accumulators of any oil and solvent that accumulated.</p> <p>The tanks were drained to a physically empty condition in June 1999 under work package T0100104. The vacuum pumps were drained in January 2000.</p> <p><u>Ancillary Equipment</u></p> <p>Set 11 contains ancillary equipment that was associated with pencil tanks T-5, 6, 7, 10, 11, and 12. The tanks have all been removed. Remaining ancillary equipment includes pumps, valves, and piping.</p>
Unit Boundaries and Interfaces:	<p>The vacuum accumulator systems include the vacuum accumulator tanks, vacuum pumps, and associated piping and valves. These were small stand-alone tank systems and the ancillary equipment is minimal. These tank systems will be entirely removed as part of Set 11 D&D. The attached drawings show schematics of the tank systems.</p> <p>The ancillary equipment includes oil/solvent transfer piping beneath the M-line and pumps and piping associated with the removed pencil tanks. All ancillary piping beneath approximately eight feet will be removed as part of Set 11, and the ends of the piping leading into the overhead will be capped or plugged. The remaining lines in the overhead in Room 134E will be removed as part of Set 78 (miscellaneous piping over eight feet). A drawing is attached showing ancillary equipment in Sets 10 and 11. Endpoints for piping</p>

	removal associated with each set will be determined during D&D work package preparation
EPA Waste Codes/ Waste Characterization:	The lines and equipment will be drained prior to packaging as waste. The waste generated at closure will be assigned EPA waste codes of F001 and F002.
Selected Closure Option:	Unit removal without onsite treatment
Closure Activities.	Closure activities include draining any residual liquids, removal, size reduction (if necessary) and packaging of the regulated tanks and ancillary equipment.
Waste Disposal:	<p>The tanks, piping, pumps, and secondary waste (e.g., PPE and plastic containment material) generated during closure activities will be managed as CERCLA remediation waste. Liquid hazardous wastes, if any, drained from the equipment will be managed as RCRA-regulated wastes. Absorbent will be added to waste packages with items that could contain residual liquids or sludges.</p> <p>Upon final radiological characterization, the waste will be packaged and managed in accordance with waste management requirements in Section 6 of the DOP.</p>

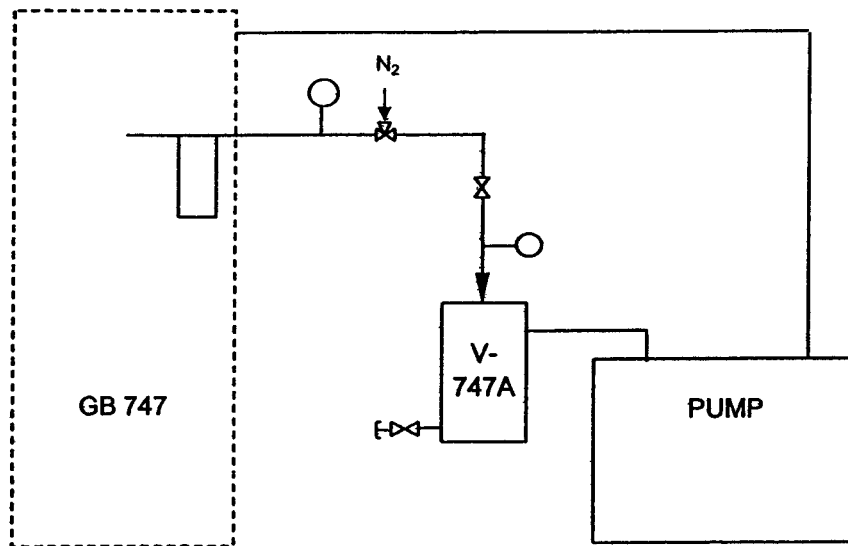
B776/777, SET 11
Building 777 Room 134E
Vacuum Accumulator V-746



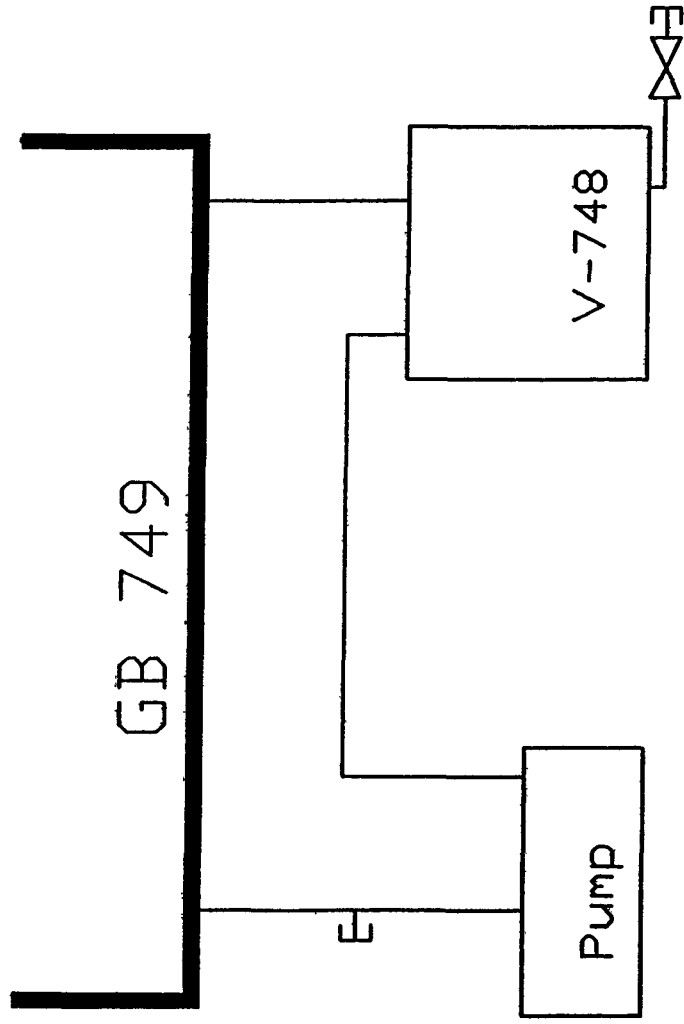
B776/777, SET 11
Building 777 Room 134E
Vacuum Accumulator V-747



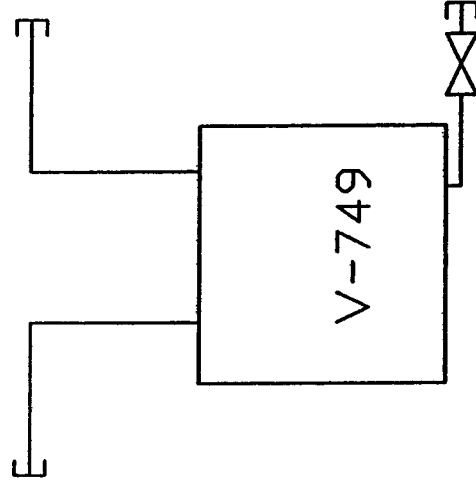
B776/777, SET 11
Building 777 Room 134E
Vacuum Accumulator V-747A



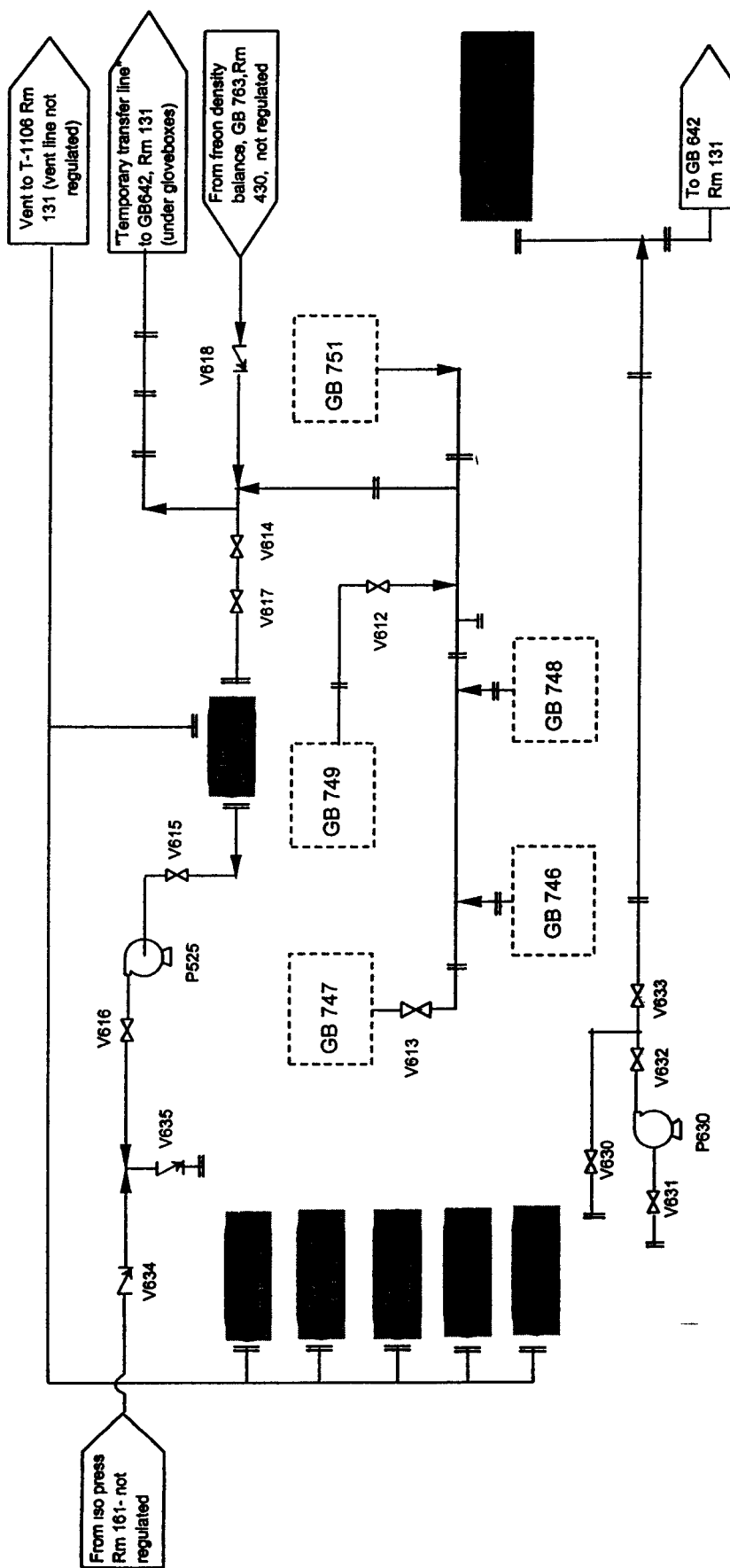
B776/777, SET 11
Building 777 Room 134E
Vacuum Accumulator V-748



B776/777, SET 11
Building 777 Room134E
Vacuum Accumulator V-749



**B776/777, SETS 10 and 11
Building 777 Room 134E
Ancillary Piping**

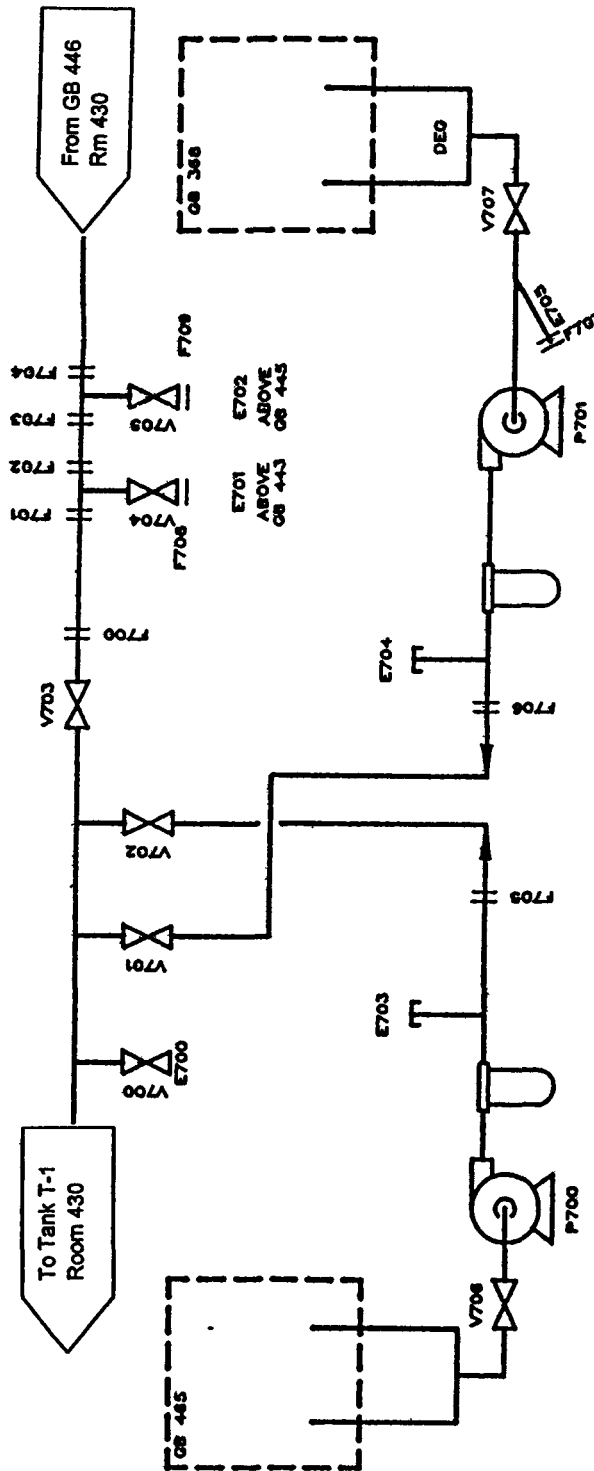


Appendix H
B776/777 Closure Project
RCRA Unit Closure Information Sheet

Unit 18: Ancillary equipment that was previously used to transfer waste 1,1,1-trichloroethane from degreasers/cleaning tanks in Gloveboxes 368 and 465 in Room 430 to Tank T-1 in Room 430. The tank has been removed (Set 26)				
18	95 015	Ancillary equipment – Gloveboxes 368 and 465	Mixed Residue	Physically Empty

Unit Description:	Set 18 contains ancillary equipment that was previously used to transfer waste 1,1,1-trichloroethane from degreasers/cleaning tanks in Gloveboxes 368 and 465 in Room 430 to Tank T-1 in Room 430. The tank has been removed (Set 26)
Unit Boundaries and Interfaces:	<p>Regulated ancillary equipment associated with both Gloveboxes 368 and 465 includes a pump, filter, and associated valves and piping from a solvent cleaning tank in each glovebox. The cleaning tanks themselves are not regulated. The waste lines from the two gloveboxes join a common line in the overhead in Room 430 that transferred the waste to Tank T-1. The attached drawing shows the ancillary equipment in this set.</p> <p>The pumps, valves, filters, and piping below approximately eight feet will be removed as part of Set 18 D&D, and the ends of the piping leading into the overhead will be capped or plugged. The remaining line in the overhead in Room 430 will be removed as part of Set 78 (miscellaneous piping over eight feet).</p>
EPA Waste Codes/ Waste Characterization	The lines and equipment will be drained prior to packaging as waste. The waste generated at closure will be assigned EPA waste codes of F001 and F002.
Selected Closure Option:	Unit removal without onsite treatment
Closure Activities	Closure activities include draining any residual liquids, removal, size reduction (if necessary) and packaging of the regulated ancillary equipment.
Waste Disposal:	<p>The piping, pumps, valves, filters, and secondary waste (e.g., PPE and plastic containment material) generated during closure activities will be managed as CERCLA remediation waste. Liquid hazardous wastes, if any, drained from the equipment will be managed as RCRA-regulated wastes. Absorbent will be added to waste packages with items that could contain residual liquids or sludges.</p> <p>Upon final radiological characterization, the waste will be packaged and managed in accordance with waste management requirements in Section 6 of the DOP.</p>

B776/777, SET 18
Building 777 Room 430
Gloveboxes 368, 465 Ancillary Piping

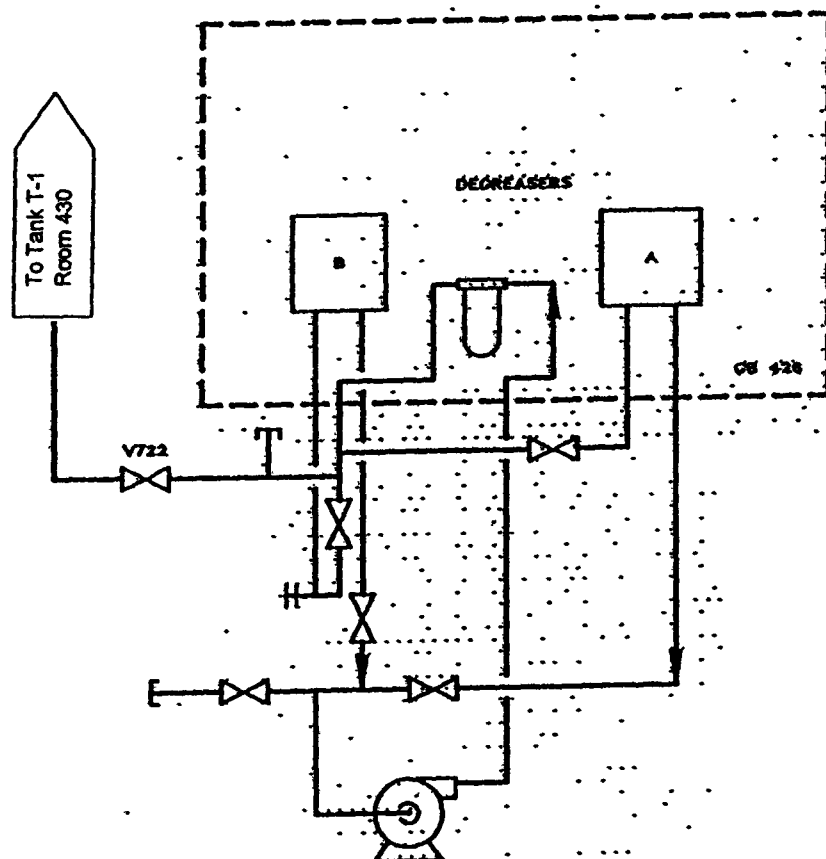


Appendix H
B776/777 Closure Project
RCRA Unit Closure Information Sheet

Unit Identification and Description				
21	95.015	Ancillary equipment – Glovebox 426	Mixed Residue	Physically Empty

Unit Description	Set 21 contains ancillary equipment that was previously used to transfer waste 1,1,1-trichloroethane from degreasers/cleaning tanks in Glovebox 426 in Room 430 to Tank T-1 in Room 430. The tank has been removed (Set 26).
Unit Boundaries and Interfaces	<p>The degreaser tanks, pump, filter, and most valves associated with glovebox 426 are not regulated because the solvent was recirculated through the system for reuse until spent, and became a waste when discharged to T-1. One valve is regulated in the line exiting the glovebox. This line joins a line in the overhead in Room 430 that transferred the waste to Tank T-1. The attached drawing shows the ancillary equipment in this set.</p> <p>The ancillary piping below approximately eight feet will be removed as part of Set 21 D&D, and the end of the piping leading into the overhead will be capped or plugged. The remaining line in the overhead in Room 430 will be removed as part of Set 78 (miscellaneous piping over eight feet).</p>
EPA Waste Codes/ Waste Characterization	The lines and equipment will be drained prior to packaging as waste. The waste generated at closure will be assigned EPA waste codes of F001 and F002.
Selected Closure Option	Unit removal without onsite treatment.
Closure Activities	Closure activities include draining any residual liquids, removal, size reduction (if necessary) and packaging of the regulated ancillary equipment.
Waste Disposal:	<p>The piping, valve, and secondary waste (e.g., PPE and plastic containment material) generated during closure activities will be managed as CERCLA remediation waste. Liquid hazardous wastes, if any, drained from the equipment will be managed as RCRA-regulated wastes. Absorbent will be added to waste packages with items that could contain residual liquids or sludges.</p> <p>Upon final radiological characterization, the waste will be packaged and managed in accordance with waste management requirements in Section 6 of the DOP.</p>

B776/777, SET 21
Building 777 Room 430
Glovebox 426 Ancillary Piping



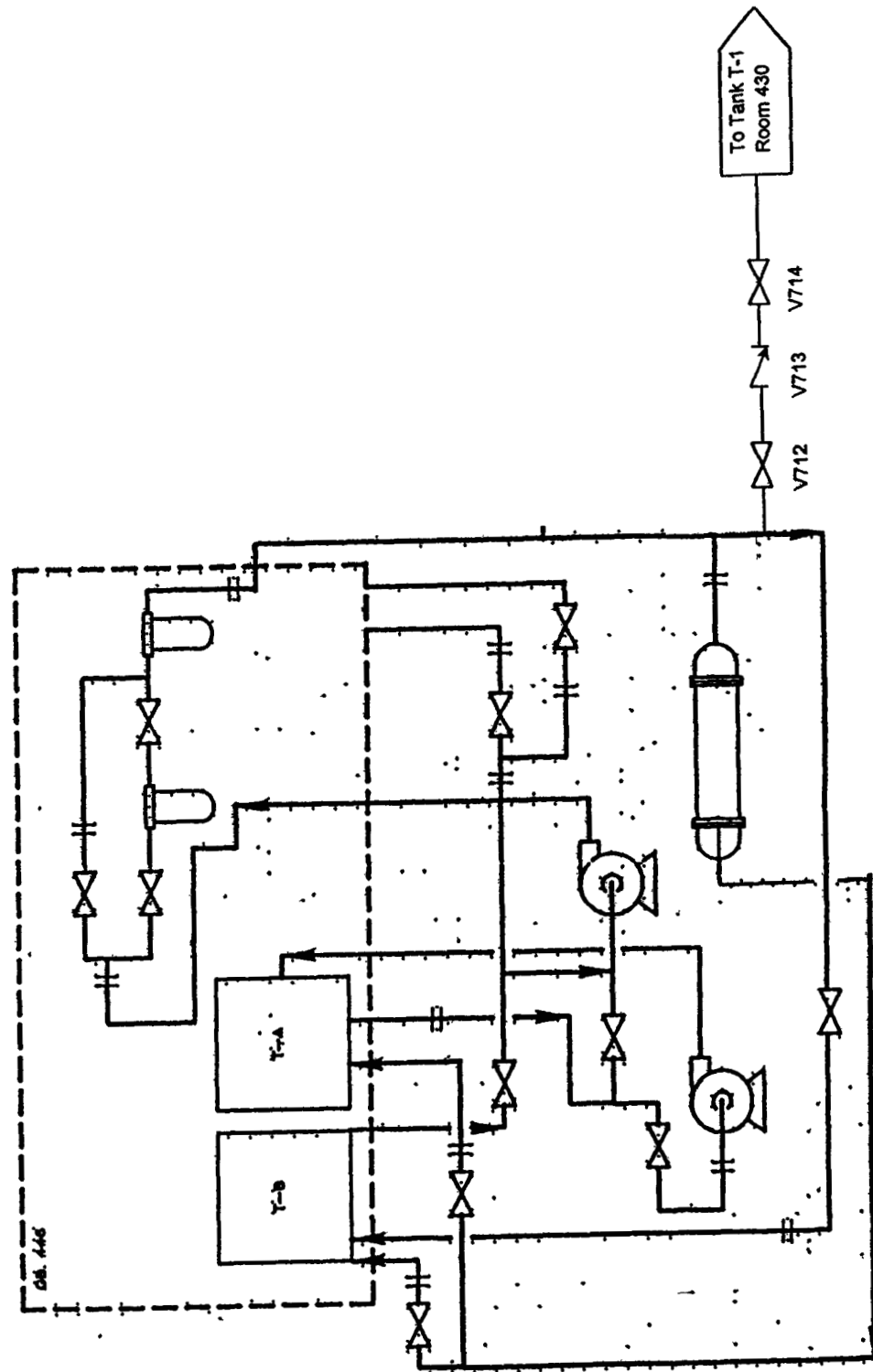
Shading indicates non-regulated equipment

Appendix H
B776/777 Closure Project
RCRA Unit Closure Information Sheet

22	95 015	Ancillary equipment – Glovebox 446	Mixed Residue	Physically Empty

Unit Description:	Set 22 contains ancillary equipment that was previously used to transfer waste 1,1,1-trichloroethane from degreasers/cleaning tanks in Glovebox 446 in Room 430 to Tank T-1 in Room 430. The tank has been removed (Set 26)
Unit Boundaries and Interfaces:	<p>The degreaser tanks, pumps, filters, and most valves associated with glovebox 446 are not regulated because the solvent was recirculated through the system for reuse until spent, and became a waste when discharged to T-1. There are three regulated valves in the line exiting the glovebox. This line joins a line in the overhead in Room 430 that transferred the waste to Tank T-1. The attached drawing shows the ancillary equipment in this set.</p> <p>The ancillary piping below approximately eight feet will be removed as part of Set 21 D&D, and the end of the piping leading into the overhead will be capped or plugged. The remaining line in the overhead in Room 430 will be removed as part of Set 78 (miscellaneous piping over eight feet)</p>
EPA Waste Codes/ Waste Characterization:	The lines and equipment will be drained prior to packaging as waste. The waste generated at closure will be assigned EPA waste codes of F001 and F002.
Selected Closure Option	Unit removal without onsite treatment
Closure Activities:	Closure activities include draining any residual liquids, removal, size reduction (if necessary) and packaging of the regulated ancillary equipment.
Waste Disposal:	<p>The piping, valves, and secondary waste (e.g., PPE and plastic containment material) generated during closure activities will be managed as CERCLA remediation waste. Liquid hazardous wastes, if any, drained from the equipment will be managed as RCRA-regulated wastes. Absorbent will be added to waste packages with items that could contain residual liquids or sludges.</p> <p>Upon final radiological characterization, the waste will be packaged and managed in accordance with waste management requirements in Section 6 of the DOP.</p>

B776/777, SET 22
Building 777 Room 430
Glovebox 446 Ancillary Piping



Shading indicates non-regulated equipment

Appendix H
B776/777 Closure Project
RCRA Unit Closure Information Sheet

RCRA Unit Closure Information Sheet				
27	777.1	Room 432C Container Storage Unit	Permitted	Drums will be removed prior to closure

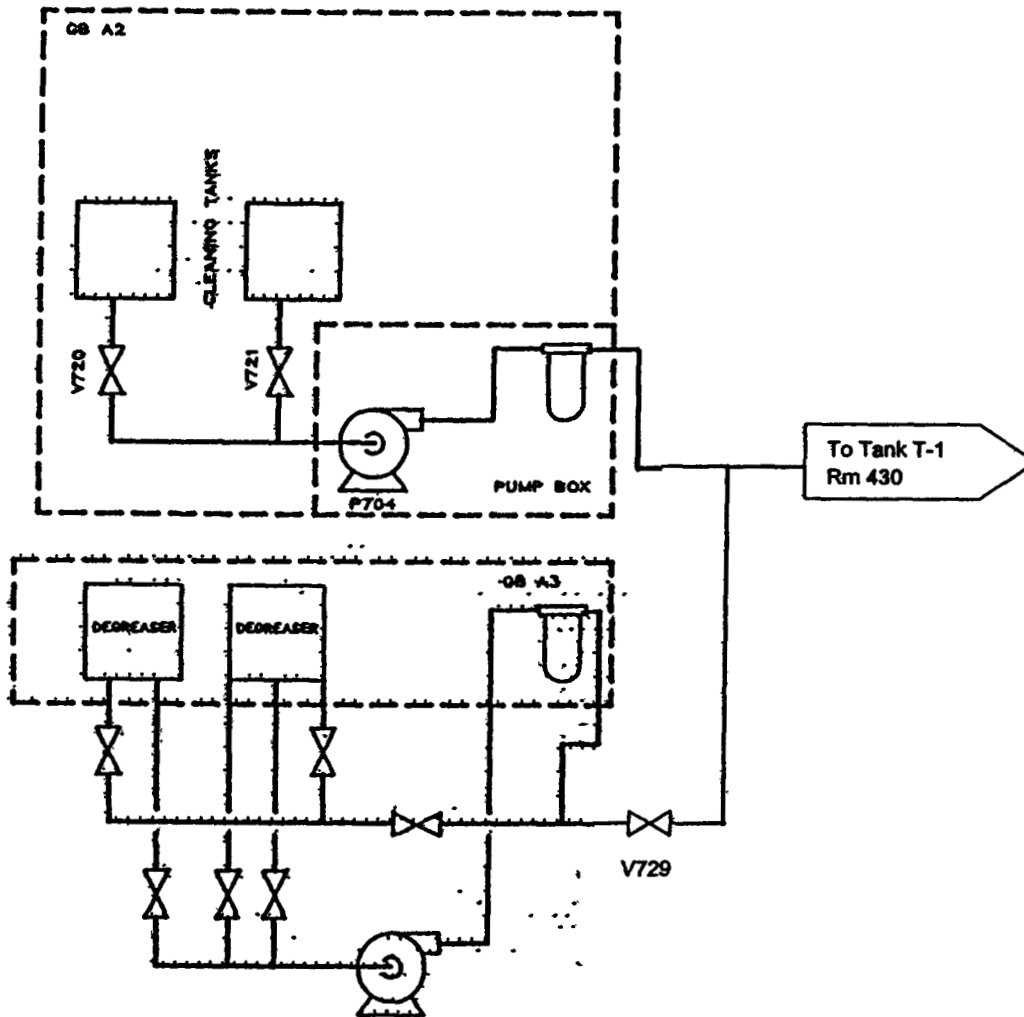
Unit Description:	Set 27 includes a permitted RCRA container storage unit in Building 777 Room 432C. It was originally permitted as Unit 17, and is now part of Unit 777.1. The room measures approximately 9'3" by 15'5". It has a stainless steel floor and a six-inch continuous stainless steel berm. The room has been used for storage of low level mixed waste containing solidified scintillation cocktail.
Unit Boundaries and Interfaces:	Room 432C provided secondary containment for RCRA container storage and is the only RCRA-regulated portion of set 27. No drawing is provided for this set, since the unit boundary is the room boundary.
EPA Waste Codes/ Waste Characterization:	The solidified scintillation cocktail stored in Room 432C has been characterized with the EPA waste code of D001 because it may contain free liquid. The waste containers will be removed prior to closure.
Selected Closure Option:	Unit removal in conjunction with debris rule treatment.
Closure Activities:	The stainless steel floor will be washed using water with an appropriate detergent, such as trisodium phosphate. Following washing, the floor will be visually inspected to determine if it meets the "clean debris surface" standard. If it meets the standard, the stainless steel floor will be removed and managed as non-hazardous low level waste. If it does not meet the standard, it will either be re-washed and re-inspected until it meets the standard, or closed by removal and characterized appropriately.
Waste Disposal:	The stainless steel floor and secondary waste (e.g., PPE, mop heads) generated during closure activities will be managed as CERCLA remediation waste. Liquid from washing the floor will be characterized and managed appropriately. Upon final radiological characterization, the waste will be packaged and managed in accordance with waste management requirements in Section 6 of the DOP.

Appendix H
B776/777 Closure Project
RCRA Unit Closure Information Sheet

Set	Unit Number	Unit Description	Waste Type	Disposition
29	95.015	Ancillary equipment	Mixed Residue	Physically Empty

Unit Description:	Set 29 contains ancillary piping that was previously used to transfer waste 1,1,1-trichloroethane from degreasers/cleaning tanks in Gloveboxes A-2 and A-3 in Room 437 to Tank T-1 in Room 430. The tank has been removed (Set 26).
Unit Boundaries and Interfaces	<p>Regulated ancillary equipment in Glovebox A-2 includes a pump, filter, and associated valves and piping from two solvent cleaning tanks in the glovebox. The cleaning tanks themselves are not regulated. Glovebox A-2 served as secondary containment for the ancillary equipment within it.</p> <p>In Glovebox A-3, the degreaser tanks, pump, filter, and valves are not regulated because the solvent was recirculated through the system for reuse until spent, and became a waste when discharged to T-1. The waste lines from the two gloveboxes join in Room 437 prior to exiting through the south wall into Room 430.</p> <p>The attached drawing shows the ancillary equipment in this set. Most of the regulated ancillary equipment and waste lines will be removed as part of Set 29 D&D, and the end of the piping leading into Room 430 will be capped or plugged. The remaining line in the overhead in Rooms 430 and 437 will be removed as part of Set 78 (miscellaneous piping over eight feet).</p>
EPA Waste Codes/ Waste Characterization	<p>The lines and equipment will be drained prior to packaging as waste. The waste generated at closure will be assigned EPA waste codes of F001 and F002.</p> <p>If Glovebox A-2 surveys as LLW, debris rule treatment may be conducted, and if successful, the glovebox will be managed as non-hazardous LLW. Otherwise, the glovebox will be managed as mixed waste with EPA waste codes of F001 and F002.</p>
Selected Closure Option:	<p><u>Ancillary piping</u> Unit removal without onsite treatment</p> <p><u>Glovebox A-2</u> Unit removal, optionally preceded by debris rule treatment</p>
Closure Activities:	<p>Closure activities include draining any residual liquids, removal, size reduction (if necessary) and packaging of the regulated ancillary equipment.</p> <p>If Glovebox A-2 surveys as LLW and debris treatment is determined to be feasible, it will be wiped down using trisodium phosphate solution, and will be visually inspected to determine if it meets the standard for a clean debris surface. If it meets the standard, the glovebox will be closed by removal and managed as non-hazardous waste. Otherwise, it will be closed by removal and managed as mixed waste.</p>
Waste Disposal:	<p>The piping, pump, valves, filter, and secondary waste (e.g., PPE and plastic containment material) generated during closure activities will be managed as CERCLA remediation waste. Liquid hazardous wastes, if any, drained from the equipment will be managed as RCRA-regulated wastes. Absorbent will be added to waste packages with items that could contain residual liquids or sludges.</p> <p>Upon final radiological characterization, the waste will be packaged and managed in accordance with waste management requirements in Section 6 of the DOP.</p>

B776/777, SET 29
Building 777 Room 437
Gloveboxes A2, A3 Ancillary Piping



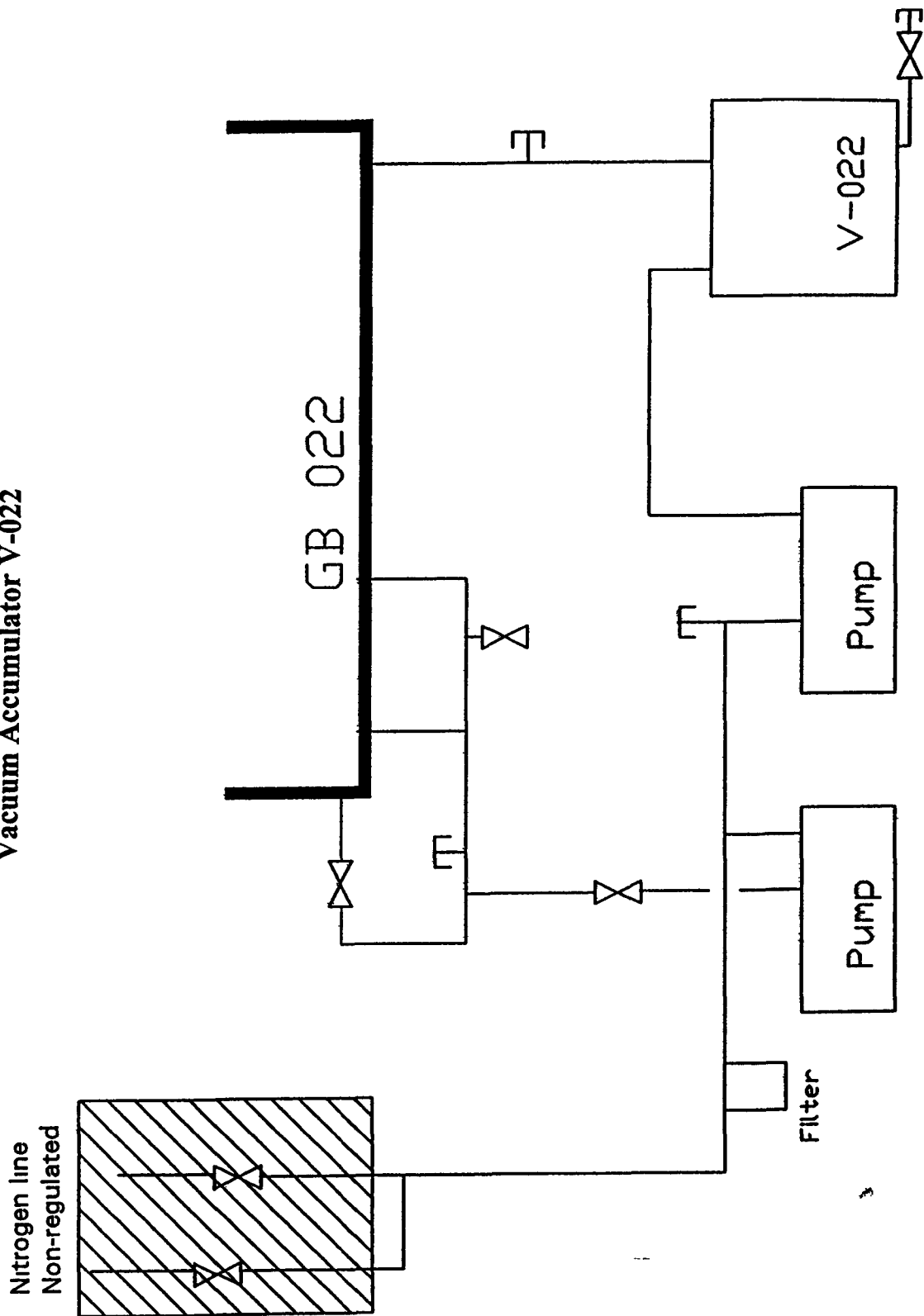
Shading indicates non-regulated equipment

Appendix H
B776/777 Closure Project
RCRA Unit Closure Information Sheet

34	NA	Tank V-022	Mixed Residue	Physically Empty/RCRA Stable
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Unit Description:	<p>Tank V-022 is a vacuum accumulator tank. It is constructed of carbon steel and has approximate dimensions of 12 inches in diameter by 23 inches high. The tank is located in Building 777 Room 452 below Glovebox 022.</p> <p>Vacuum was used to hold parts to equipment in the glovebox as they were being machined. The vacuum accumulator was used in the process line between the equipment and the vacuum pump so that constant vacuum pressure could be maintained on the parts being machined. In the event of an upset condition where the part came loose from the chuck, the cutting oils and solvents used in the machining process would be pulled into the accumulator. Maintenance personnel periodically drained the accumulator of any oil and solvent that accumulated.</p> <p>Tank V-022 and the associated vacuum pumps were drained to a physically empty condition in January 2000 under work package T0100104.</p>
Unit Boundaries and Interfaces:	The vacuum accumulator system includes the vacuum accumulator tank, vacuum pumps, and associated piping and valves. This was a small stand-alone tank system and the ancillary equipment is minimal. This tank system will be entirely removed as part of Set 34 D&D. The attached drawing shows a schematic of the tank system.
EPA Waste Codes/ Waste Characterization:	The lines and equipment will be drained prior to packaging as waste. The waste generated at closure will be assigned EPA waste codes of F001 and F002.
Selected Closure Option:	Unit removal without onsite treatment
Closure Activities:	Closure activities include draining any residual liquids, removal, size reduction (if necessary) and packaging of the tank and regulated ancillary equipment.
Waste Disposal:	<p>The tank, piping, pumps, and secondary waste (e.g., PPE and plastic containment material) generated during closure activities will be managed as CERCLA remediation waste. Liquid hazardous wastes, if any, drained from the equipment will be managed as RCRA-regulated wastes. Absorbent will be added to waste packages with items that could contain residual liquids or sludges.</p> <p>Upon final radiological characterization, the waste will be packaged and managed in accordance with waste management requirements in Section 6 of the DOP.</p>

**B776/777, SET 34
Building 777 Room 452
Vacuum Accumulator V-022**

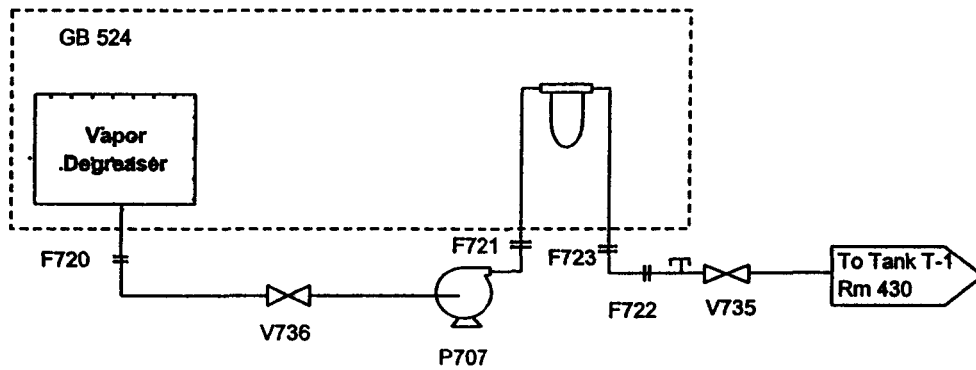


Appendix H
B776/777 Closure Project
RCRA Unit Closure Information Sheet

Unit Number	Unit ID	Unit Description	Waste Type	Disposition
35	95.015	GB 524 Ancillary equipment	Mixed Residue	Physically Empty

Unit Description:	Set 35 contains ancillary piping that was previously used to transfer waste 1,1,1-trichloroethane from a vapor degreaser in Glovebox 524 in Room 452 to Tank T-1 in Room 430. The tank has been removed (Set 26).
Unit Boundaries and Interfaces:	Regulated ancillary equipment associated with Glovebox 524 includes a pump, filter, and associated valves and piping from a vapor degreaser in the glovebox. The degreaser tank itself is not regulated. Glovebox 524 served as secondary containment for the ancillary equipment within it. The waste line from the glovebox goes through the overhead in Room 452 prior to exiting through the west wall on the north side of the Modulab. The pump, valves, filter, and piping below eight feet will be removed as part of Set 35 D&D and the end of the piping leading into the overhead will be capped or plugged. The remaining line in Room 452 will be removed as part of Set 36 and/or Set 78 (miscellaneous piping over eight feet). Endpoints for piping removal associated with each set will be determined during D&D work package preparation. The attached diagram shows the regulated equipment associated with Glovebox 524.
EPA Waste Codes/ Waste Characterization	The lines and equipment will be drained prior to packaging as waste. The waste generated at closure will be assigned EPA waste codes of F001 and F002. If Glovebox 524 surveys as LLW, debris rule treatment may be conducted, and if successful, the glovebox will be managed as non-hazardous LLW. Otherwise, the glovebox will be managed as mixed waste with EPA waste codes of F001 and F002.
Selected Closure Option:	<u>Ancillary equipment</u> Unit removal without onsite treatment. <u>Glovebox 524</u> Unit removal, optionally preceded by debris rule treatment.
Closure Activities:	Closure activities include draining any residual liquids, removal, size reduction (if necessary) and packaging of the regulated ancillary equipment associated with GB 524. If Glovebox 524 surveys as LLW and debris treatment is determined to be feasible, it will be wiped down using trisodium phosphate solution, and will be visually inspected to determine if it meets the standard for a clean debris surface. If it meets the standard, the glovebox will be closed by removal and managed as non-hazardous waste. Otherwise, it will be closed by removal and managed as mixed waste.
Waste Disposal:	The piping, pump, filter, and secondary waste (e.g., PPE and plastic containment material) generated during closure activities will be managed as CERCLA remediation waste. Liquid hazardous wastes, if any, drained from the equipment will be managed as RCRA-regulated wastes. Absorbent will be added to waste packages with items that could contain residual liquids or sludges. Upon final radiological characterization, the waste will be packaged and managed in accordance with waste management requirements in Section 6 of the DOP.

B776/777, SET 35
Building 777 Room 452
Glovebox 524 Ancillary Piping



Shading indicates non-regulated equipment

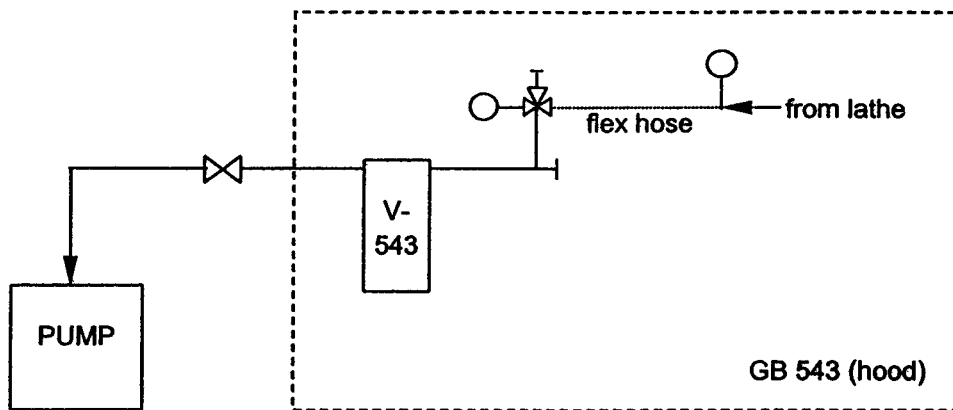
Appendix H
B776/777 Closure Project
RCRA Unit Closure Information Sheet

UNIT INFORMATION				
36	NA	Tank V-543	Mixed Residue	Physically Empty/RCRA Stable

Unit Description:	<p>Tank V-543 is a vacuum accumulator tank. It is constructed of carbon steel and has approximate dimensions of four inches in diameter by eight inches high. The tank is located in Building 777 Room 452 inside Glovebox 543. The vacuum pump is located outside the glovebox.</p> <p>Vacuum was used to hold parts to a lathe in Glovebox 543 as they were being machined. The vacuum accumulator was used in the process line between the equipment and the vacuum pump so that constant vacuum pressure could be maintained on the parts being machined. In the event of an upset condition where the part came loose from the chuck, the cutting oils and solvents used in the machining process would be pulled into the accumulator. Maintenance personnel periodically drained the accumulator of any oil and solvent that accumulated.</p> <p>Tank V-543 and the associated vacuum pump were drained to a physically empty condition in January 2000 under work package T0100104.</p>
Unit Boundaries and Interfaces:	<p>The vacuum accumulator system includes the vacuum accumulator tank, vacuum pump, and associated piping and valves. This was a small stand-alone tank system and the ancillary equipment is minimal. This tank system will be entirely removed as part of Set 36 D&D. Glovebox 543 served as secondary containment for the ancillary equipment within it. The attached drawing shows a schematic of the tank system.</p>
EPA Waste Codes/ Waste Characterization:	<p>The lines and equipment will have been drained prior to packaging as waste. The waste generated at closure will be assigned EPA waste codes of F001 and F002.</p> <p>If Glovebox 543 surveys as LLW, debris rule treatment may be conducted, and if successful, the glovebox will be managed as non-hazardous LLW. Otherwise, the glovebox will be managed as mixed waste with EPA waste codes of F001 and F002.</p>
Selected Closure Option.	<p><u>Tank and ancillary equipment.</u> Unit removal without onsite treatment</p> <p><u>Glovebox 543.</u> Unit removal, optionally preceded by debris rule treatment</p>
Closure Activities:	<p>Closure activities include draining any residual liquids, removal, size reduction (if necessary) and packaging of the tank and ancillary equipment.</p> <p>If Glovebox 543 surveys as LLW and debris treatment is determined to be feasible, it will be wiped down using trisodium phosphate solution, and will be visually inspected to determine if it meets the standard for a clean debris surface. If it meets the standard, the glovebox will be closed by removal and managed as non-hazardous waste. Otherwise, it will be closed by removal and managed as mixed waste.</p>
Waste Disposal:	<p>The tank, piping, pump, and secondary waste (e.g., PPE and plastic containment material) generated during closure activities will be managed as CERCLA remediation waste. Liquid hazardous wastes, if any, drained from the equipment will be managed as RCRA-regulated wastes. Absorbent will be added to waste packages with items that could contain residual liquids or sludges.</p>

	Upon final radiological characterization, the waste will be packaged and managed in accordance with waste management requirements in Section 6 of the DOP
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B776/777, SET 36
Building 777 Room 452
Vacuum Accumulator V-543



Appendix H
B776/777 Closure Project
RCRA Unit Closure Information Sheet

RCRA Unit Closure Information Sheet				
Set	RCRA Unit	RCRA Unit Name	Waste Description	Waste Status
52	94.007	Tank T-360	Mixed Residue	Physically Empty
	94.008	Tank T-370	Mixed Residue	Physically Empty

Unit Description:	<p>Tanks T-360 and T-370 (RCRA Units 94 007 and 94 008) are annular tanks located in Room 134 in Building 776. The stainless steel tanks are 60.5" outside diameter by 106" high, with an annular thickness of 2". The operational capacities were approximately 127 gallons each.</p> <p>The tanks were used to collect steam condensate generated in the Advanced Size Reduction Facility (ASRF). The condensate was initially collected in the ASRF pencil tanks T-344 and T-345 (in set 66) prior to shipment to the annular tanks. The waste from Tanks T-360 and T-370 was filtered in Gloveboxes 361 and 371 respectively prior to transfer to Tanks T-1A and T-1B in Room 127 (RCRA Unit 776 2, set 69). Each glovebox contains a pump, Ful-Flo filter, valves, and ancillary piping. The gloveboxes served as secondary containment for the ancillary equipment within them. A bermed concrete area provided secondary containment for the tanks.</p>
Unit Boundaries and Interfaces:	<p>SET 52 includes Tanks T-360 and T-370, Gloveboxes 361 and 371, and ancillary equipment in Room 134. Associated ancillary equipment includes inlet piping coming from Tanks T-344 and T-345, pumps, filters and piping in gloveboxes 361 and 371, recirculation piping, and outlet piping leading to Tanks T-1A and T-1B in Room 127 (SET 69, RCRA Unit 776 2).</p> <p>All ancillary piping beneath approximately eight feet will be removed as part of Set 52, and the ends of the piping leading into the overhead will be capped or plugged. The remaining lines in the overhead in Room 134 will be removed as part of Set 78 (miscellaneous piping over eight feet). A drawing is attached showing the tanks and ancillary equipment. Endpoints for piping removal associated with this set will be determined during D&D work package preparation.</p>
EPA Waste Codes/ Waste Characterization:	<p>The tanks were drained to a physically empty condition in June 2000. Analytical results show that the liquid waste contains low levels of listed solvents (1,1,1 trichloroethane at up to 1100 ug/l and carbon tetrachloride at up to 570 ug/l) and levels of RCRA metals below TCLP.</p> <p>EPA waste codes of F001 and F002 will be applied to the tanks and ancillary equipment upon removal. The waste is below LDR levels for these waste codes.</p> <p>If Gloveboxes 361 and 371 survey as LLW, debris rule treatment may be conducted, and if successful, the gloveboxes will be managed as non-hazardous LLW. Otherwise, the gloveboxes will be managed as LDR-compliant mixed waste with EPA waste codes of F001 and F002.</p> <p>The metal secondary containment berm will be cleaned using debris rule technology and managed as LLW.</p>

Selected Closure Option:	<u>Tanks and ancillary piping</u> Unit removal without onsite treatment <u>Gloveboxes 361 and 371 and metal berm</u> Unit removal in conjunction with debris rule treatment <u>Concrete floor</u> Clean closure by decontamination
Closure Activities:	<p>Closure activities for Tanks 360 and 370 and ancillary piping, pumps, valves, and filters include draining any residual liquids, removal, size reduction (if necessary) and packaging of the tanks and ancillary equipment as mixed waste</p> <p>Gloveboxes 361 and 371 and the metal secondary containment berm will be wiped down using trisodium phosphate solution, and will be visually inspected to determine if they meet the standard for a clean debris surface. If they meet the standard, the gloveboxes and berm will be closed by removal and managed as non-hazardous waste. If they do not meet the standard, they will either be re-washed and re-inspected until they meet the standard, or closed by removal and managed as mixed waste</p> <p>The concrete floor will be cleaned and rinsed, and the rinse water will be sampled to determine if it meets the closure performance standards listed in Section 4.5.1.1 of the DOP. If test results indicate the standard has been met, the concrete will be considered clean closed. If the standard is not met, CDPHE will be consulted to determine whether the results are protective of human health and the environment, in accordance with the DOP</p>
Waste Disposal:	<p>The tanks, ancillary equipment, secondary containment, and secondary waste (e.g., PPE and plastic containment material) generated during closure activities will be managed as CERCLA remediation waste. Liquid hazardous wastes, if any, from draining the equipment will be managed as RCRA-regulated wastes. Absorbent will be added to waste packages with items that could contain residual liquids or sludges</p> <p>Upon final radiological characterization, the waste will be packaged and managed in accordance with waste management requirements in Section 6 of the DOP</p>

B776/777, SET 52
 Building 776 Room 134
 Annular Tanks T-360, T-370
 RCRA Units 94.007, 94.008

